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NEWS	5	JAN		MARPAT searching enhanced
NEWS	6	JAN	28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS	7	JAN		TOXCENTER enhanced with reloaded MEDLINE segment
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NEWS	13	FEB	29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification
NEWS	14	MAR	31	IFICDB, IFIPAT, and IFIUDB enhanced with new custom
NEWS	15	MAR	31	IPC display formats CAS REGISTRY enhanced with additional experimental
				spectra
NEWS	16	MAR	31	CA/CAplus and CASREACT patent number format for U.S.
				applications updated
NEWS		MAR		LPCI now available as a replacement to LDPCI
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NEWS	20	APR	15	WPIDS, WPINDEX, and WPIX enhanced with new predefined hit display formats
NEWS	21	APR	28	EMBASE Controlled Term thesaurus enhanced
NEWS	22	APR	28	IMSRESEARCH reloaded with enhancements
NEWS	23	MAY	30	INPAFAMDB now available on STN for patent family
				searching
NEWS	24	YAM	30	DGENE, PCTGEN, and USGENE enhanced with new homology sequence search option
NEWS	25	JUN	0.6	EPFULL enhanced with 260,000 English abstracts
NEWS		JUN		KOREAPAT updated with 41,000 documents
NEWS		JUN		USPATFULL and USPAT2 updated with 11-character
				patent numbers for U.S. applications
NEWS	28	JUN	19	CAS REGISTRY includes selected substances from web-based collections
NEWS	29	JUN	25	CA/CAplus and USPAT databases updated with IPC

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=> s flexible (L) polyurethane (L) diol (L) triol 42 FILES SEARCHED...

.1 4054 FLEXIBLE (L) POLYURETHANE (L) DIOL (L) TRIOL

=> s 11 (L) hydrodroformylation (L) raney (2w) nickel L2 0 L1 (L) HYDRODROFORMYLATION (L) RANEY (2W) NICKEL

=> s 11 (L) hydroformylation (L) (raney (2w) nickel) 41 FILES SEARCHED...

L3 8 L1 (L) HYDROFORMYLATION (L) (RANEY (2W) NICKEL)

=> d 13 1-8 ibib abs

L3 ANSWER 1 OF 8 USPATFULL on STN

ACCESSION NUMBER: 2006:227438 USPATFULL

TITLE: Aldehyde and alcohol compositions derived from seed

INVENTOR(S): Lysenko, Zenon, Midland, MI, UNITED STATES

Morrison, Donald L., Fort Collins, CO, UNITED STATES
Babb, David A., Lake Jackson, TX, UNITED STATES
Bunning, Donald L., South Charleston, WV, UNITED STATES
Burstine, Christopher W., Winfield, WV, UNITED STATES
Glichrist, James H., Dunbar, WV, UNITED STATES
Jouett, H. Ray, Houston, TX, UNITED STATES
Jouett, H. Ray, Houston, TX, UNITED STATES
Stanel, Jeffrey S., Hurricane, WV, UNITED STATES
Pland, Fig. Wei-Jun, Hurricane, WV, UNITED STATES
Peng, Wei-Jun, Hurricane, WV, UNITED STATES
Philips, Joe D., Lake Jacksons, TX, UNITED STATES
Sanders, Aaron W., Missouri City, TX, UNITED STATES
Schrock, Alan K., Lake Jackson, TX, UNITED STATES
Schrock, Alan K., Lake Jackson, TX, UNITED STATES

PATENT INFORMATION: APPLICATION INFO.:

US	20060193802	A1	20060831		
US	2004-551854	A1	20040422	(10)	
WO	2004-US12246		20040422		
			20050930	PCT 371	date

NUMBER KIND DATE

07/17/2008 Page 5

LEGAL REPRESENTATIVE: THE DOW CHEMICAL COMPANY, INTELLECTUAL PROPERTY
SECTION, P. O. BOX 1967, MIDLAND, MI, 48641-1967, US

NUMBER OF CLAIMS: 34 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 1 Drawing Page(s)
LINE COUNT: 1284

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

An aldehyde composition derived by hydroformylation of a transesterified seed oil and containing a mixture of formyl-substituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoformyl, greater than about 1 to less than about 65 percent diformyl, and greater than about 0.1 to less than about 10 percent triformyl-substituted fatty acids or fatty acid esters, and having a diformyl to triformyl weight ratio of greater than about 5/1; preferably, greater than about 3 to less than about 20 percent saturates; and preferably, greater than about 1 to less than about 20 percent unsaturates. An alcohol composition derived by hydrogenation of the aforementioned aldehyde composition, containing a mixture of hydroxymethyl-substituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoalcohol (mono(hydroxymethyl)), greater than about 1 to less than about 65 percent diol (di(hydroxymethyl)). greater than about 0.1 to less than about 10 percent triol, tri(hydroxmethyl)-substituted fatty acids or fatty acid esters; preferably greater than about 3 to less than about 35 percent saturates; and preferably, less than about 10 percent unsaturates. The alcohol composition can be converted into an oligomeric polyol for use in the manufacture of polyurethane slab stock flexible foams.

### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 2 OF 8 USPATFULL on STN

ACCESSION NUMBER: 2004:89059 USPATFULL

TITLE: Flexible emissive coatings for elastomer substrates

INVENTOR(S): Halladay, James R., Harborcreek, PA, UNITED STATES
Krakowski, Frank J., Erie, PA, UNITED STATES
Caster, Kenneth C., Cary, NC, UNITED STATES
Troughton, Ernest Barritt, JR., Raleigh, NC, UNITED
STATES

NUMBER KIND DATE

PATENT INFORMATION: US 20040068036 A1 20040408 IIS 6777026 B2 20040817 US 2002-265576 APPLICATION INFO.: A1 20021007 (10) DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION LEGAL REPRESENTATIVE: Miles B. Dearth, 111 Lord Drive, P.O. Box 8012, Cary, NC, 27512-8012 NUMBER OF CLAIMS: 24

EXEMPLARY CLAIMS: 24

NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 3618

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Emissive coatings for flexible substrates, preferably elastomers or elastomers bonded to metal are disclosed The coating composition is formed by combining parts (a) and (b) where part (a) comprises an

organic solution or aqueous dispersion of a functional group containing polymer or copolymer and thermal conductive filler; and part (b) comprises a liquid curing component, for example a poly isocyanate, a carbodiimide, or an amino resin. The coating compounds can be applied to an substrate either before or after the substrate has been vulcanized. The coatings can be cured at ambient temperatures and provide heat dissipation over long term service at elevated temperatures.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 3 OF 8 USPATFULL on STN

ACCESSION NUMBER: 97:45055 USPATFULL

TITLE: Hydroxy-functional triamine catalyst compositions for

polyurethane production

Van Court Carr, Richard, Allentown, PA, United States INVENTOR(S):

Listemann, Mark L., Whitehall, PA, United States Savoca, Ann C. L., Bernville, PA, United States

PATENT ASSIGNEE(S): Air Products and Chemicals, Inc., Allentown, PA, United

States (U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5633293 19970527 US 1995-565518 19951130 (8) APPLICATION INFO.: DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: Gorr, Rachel

LEGAL REPRESENTATIVE: Leach, Michael, Marsh, William F. NUMBER OF CLAIMS: 21

EXEMPLARY CLAIM: LINE COUNT: 641

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A method for preparing a polyurethane foam which comprises reacting an organic polyisocyanate and a polyol in the presence of a blowing agent, a cell stabilizer and a catalyst composition consisting essentially of 0-50 mole % compound I and 50-100 mole % compound II: ##STR1## wherein R is hydrogen, a C.sub.1 -C.sub.4 alkly, C.sub.6 -C.sub.8 aryl, or C.sub.7 -C.sub.9 aralkyl group; and

n is 2 to 8.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 4 OF 8 USPATFULL on STN

ACCESSION NUMBER: 90:48873 USPATFULL

TITLE: Trimethylolheptanes and use thereof INVENTOR(S): Omatsu, Toshihiro, Kurashiki, Japan Tokitoh, Yasuo, Kurashiki, Japan

Yoshimura, Noriaki, Kurashiki, Japan Ishida, Masao, Kurashiki, Japan Yano, Makoto, Kurashiki, Japan Hirai, Koji, Kurashiki, Japan

Matsumoto, Yoichi, Kamisu, Japan Kubo, Keiji, Kurashiki, Japan

PATENT ASSIGNEE(S): Kurary Company, Ltd., Kurashiki, Japan (non-U.S.

corporation)

	NUMBER	KIND DATE	
PATENT INFORMATION: APPLICATION INFO.:	US 4935488 US 1989-340791	19900619 19890420	(7)
	NUMBER	DATE	
PRIORITY INFORMATION:	JP 1988-99115 JP 1988-127678 JP 1989-12666 JP 1989-12667	19880524 19890120	
DOCUMENT TYPE: FILE SEGMENT: PRIMARY EXAMINER: ASSISTANT EXAMINER:	Utility Granted Kight, III, John Acquah, S. A.	-Clallend Maden	5 Wassahadh
LEGAL REPRESENTATIVE: NUMBER OF CLAIMS: EXEMPLARY CLAIM:	Oblon, Spivak, Mo 31 1	CCIelland, Maier	& Neustadt

NUMBER OF DRAWINGS: 5 Drawing Figure(s); 5 Drawing Page(s) LINE COUNT: 1724

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Novel trimethylolheptanes having three highly reactive hydroxyl groups are provided. They are useful as raw materials for the production of polyesters for use in or as raw materials or modifiers for paints, inks, adhesives, coating compositions and molding resins. Uses for the trimethylolheptanes are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 5 OF 8 USPATOLD on STN

ACCESSION NUMBER: 1972:61906 USPATOLD

TITLE: DIACID BRIDGED RING COMPOUNDS

INVENTOR(S): LYNN JOHN W
HENRY JOSEPH P

HENRY JOSEPH P TRECKER DAVID J

PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

	NUMBER	KIND	DATE
PATENT INFORMATION: APPLICATION INFO.:	US 3646132 US 1969-846251	Α	19720229 19690701
	NUMBER		DATE
PRIORITY INFORMATION:	US 1965-520298 US 1969-846251 US 1969-846256		19651209 19690730 19690730

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: WEINBERGER, LORRAINE A

ASSISTANT EXAMINER: GLEIMAN, E J

LINE COUNT: 1678

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 6 OF 8 USPATOLD on STN

ACCESSION NUMBER: 1970:4861 USPATOLD

TITLE: NORBORNANE DIISOCYANATES
INVENTOR(S): LYNN JOHN W

HENRY JOSEPH P

TRECKER DAVID J

PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

 NUMBER
 KIND
 DATE

 PATENT INFORMATION:
 US 3492330
 A 19700127

 APPLICATION INFO.:
 US 1966-520298
 19660101

NUMBER DATE
PRIORITY INFORMATION: US 1965-520298 19651209
US 1969-846251 19690730

US 1969-846251 19690730
US 1969-846256 19690730

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED

PRIMARY EXAMINER: GRANTED
PRIMARY EXAMINER: PARKER, CHARLES B
LINE COUNT: 1827

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 7 OF 8 USPATOLD on STN

ACCESSION NUMBER: 1966:16685 USPATOLD

TITLE: Electrical resistive polyurethane resin from a mixture

of polyols containing nonadecanediol INVENTOR(S): DE WITT ELMER J

MURPHY WALTER T

NUMBER DATE

PRIORITY INFORMATION: US 1963-270152 19630403

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
LINE COUNT: 807

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 8 OF 8 USPAT2 on STN

ACCESSION NUMBER: 2004:89059 USPAT2

TITLE: Flexible emissive coatings for elastomer substrates INVENTOR(S): Halladay, James R., Harborcreek, PA, United States Krakowski, Frank J., Erie, PA, United States

Caster, Kenneth C., Cary, NC, United States Troughton, Jr., Ernest Barritt, Raleigh, NC, United States

PATENT ASSIGNEE(S): Lord Corporation, Cary, NC, United States (U.S.

corporation)

 NUMBER
 KIND
 DATE

 PATENT INFORMATION:
 US 6777026
 B2 20040817

APPLICATION INFO.: US 2002-265576 20021007 (10) DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED PRIMARY EXAMINER: Cameron, Erma LEGAL REPRESENTATIVE: Dearth, Miles B. NUMBER OF CLAIMS: 35 EXEMPLARY CLAIM: NUMBER OF DRAWINGS: 6 Drawing Figure(s); 6 Drawing Page(s) LINE COUNT: 3579 CAS INDEXING IS AVAILABLE FOR THIS PATENT. Emissive coatings for flexible substrates, preferably elastomers or elastomers bonded to metal are disclosed The coating composition is formed by combining parts (a) and (b) where part (a) comprises an organic solution or aqueous dispersion of a functional group containing polymer or copolymer and thermal conductive filler; and part (b) comprises a liquid curing component, for example a poly isocyanate, a carbodiimide, or an amino resin. The coating compounds can be applied to an substrate either before or after the substrate has been vulcanized. The coatings can be cured at ambient temperatures and provide heat dissipation over long term service at elevated temperatures. CAS INDEXING IS AVAILABLE FOR THIS PATENT. => d his (FILE 'HOME' ENTERED AT 08:06:06 ON 17 JUL 2008) FILE '1MOBILITY, 2MOBILITY, ALUMINIUM, ANTE, APOLLIT, BABS, CAPLUS, CBNB, CEABA-VTB, CERAB, CIN, CIVILENG, COMPENDEX, COPPERLIT, CORROSION, DKF, EMA, ENERGY, HEALSAFE, IFIPAT, INSPEC, INSPHYS, MATBUS, MDF, MECHENG, METADEX, MSDS-CCOHS, MSDS-OHS, PASCAL, ...' ENTERED AT 08:07:07 ON 17 JUL 2008 4054 S FLEXIBLE (L) POLYURETHANE (L) DIOL (L) TRIOL L2 0 S L1 (L) HYDRODROFORMYLATION (L) RANEY (2W) NICKEL L3 8 S L1 (L) HYDROFORMYLATION (L) (RANEY (2W) NICKEL) => 11 (L) (ranev (2w) nickel) L1 IS NOT A RECOGNIZED COMMAND The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>). => s 11 (L) (ranev (2w) nickel) 57 L1 (L) (RANEY (2W) NICKEL) 1.4 => s 14 not 13 L5 49 L4 NOT L3 => s 15 and ratio 45 L5 AND RATIO => s 16 and (ethanol or methanol or propanol) 42 FILES SEARCHED... 33 L6 AND (ETHANOL OR METHANOL OR PROPANOL) => d 17 1-10 ibib abs

L7 ANSWER 1 OF 33 USPATFULL on STN

ACCESSION NUMBER: 2007:201150 USPATFULL

TITLE: Bioplastics, monomers thereof, and processes for the

preparation thereof from agricultural feedstocks

INVENTOR(S): Narine, Suresh, Alberta, CANADA Sporns, Peter, Alberta, CANADA Yue, Jin, Alberta, CANADA

NUMBER KIND DATE \_\_\_\_\_ US 20070175793 A1 20070802 US 2007-649620 A1 20070104 (11) PATENT INFORMATION: APPLICATION INFO.:

NUMBER DATE

PRIORITY INFORMATION: US 2006-755770P 20060104 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: DANN, DORFMAN, HERRELL & SKILLMAN, 1601 MARKET STREET, SUITE 2400, PHILADELPHIA, PA, 19103-2307, US

NUMBER OF CLAIMS: 40 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 87 Drawing Page(s)

LINE COUNT: 3864

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates generally to polymers and monomers derived from agricultural feedstocks, and more particularly to methods for the production of monomers from renewable agricultural resources such as feedstocks, for example canola, flax and tallow, and polymers, in particular polyurethanes produced from monomers derived from such feedstocks. The present invention also relates to novel processes for the production of short-chain alcohols, as well as hydroxyl wax esters, from renewable feedstocks. An improved apparatus for carrying out

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 2 OF 33 USPATFULL on STN

ACCESSION NUMBER: 2005:264715 USPATFULL

ozonolysis reactions is also disclosed.

TITLE: Activatable material and method of forming and using

INVENTOR(S): Kassa, Abraham, Shelby Township, MI, UNITED STATES

Harthcock, Matthew, Oakland Township, MI, UNITED STATES

Sendijarevic, Aisa, Trov, MI, UNITED STATES

Sendijarevic, Vahid, Troy, MI, UNITED STATES L&L Products, Inc., Romeo, MI, UNITED STATES (U.S. PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE PATENT INFORMATION: APPLICATION INFO.: US 20050230027 A1 20051020 US 2005-89712 A1 20050325

20050325 (11)

PRIORITY INFORMATION: US 2004-622442P 20041027 (60)

NUMBER DATE

US 2004-562663P 20040415 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: DOBRUSIN & THENNISCH PC, 29 W LAWRENCE ST, SUITE 210,

PONTIAC, MI, 48342, US

NUMBER OF CLAIMS: 20

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 4 Drawing Page(s)

LINE COUNT: 1354

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An activatable material and articles incorporating the same is disclosed. The activatable material includes an isocyanate and an isocyanate reactive compound. The isocyanate is typically blocked such that the activatable material is non-reactive at temperatures below about 100° C. The activatable material is preferably used for sealing, baffling, reinforcing, adhering, sound attenuation, sound damping or the like of an article of manufacture such as an automotive vehicle.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 3 OF 33 USPATFULL on STN

ACCESSION NUMBER: 2003:325213 USPATFULL

TITLE: HIGH PERFORMANCE RIM ELASTOMERS AND A PROCESS FOR THEIR

PRODUCTION

INVENTOR(S): Super, Michael S., Oakdale, PA, UNITED STATES
Steppan, David D., Gibsonia, PA, UNITED STATES
Slack, William E., Moundsville, WV, UNITED STATES
Potts, Bruce H., Beaver, PA, UNITED STATES

Hurley, Michael F., Pittsburgh, PA, UNITED STATES

		NUMBER	KIND	DATE	
PATENT INFORMATION:	US	20030229195	A1	20031211	
	US	6765080	B2	20040720	
APPLICATION INFO.:	US	2002-165297	A1	20020606	(10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: BAYER POLYMERS LLC, 100 BAYER ROAD, PITTSBURGH, PA,

NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
LINE COUNT: 1305

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention relates to high performance RIM (reaction injection molded) poly furethane) urea elastomers, and to a process for their production. These elastomers comprise the reaction product of an allophanate-modified diphenylmethane diisocyanate prepolymer having an NCO group content of about 5 to about 30%, with an isocyanate-reactive component comprising a high molecular weight amine-terminated polyether polyol, an aromatic diamine chain extender, and, optionally, a chain extender or crosslinker selected from the group consisting of aliphatic amine terminated polyether polyols and aliphatic hydroxyl terminated polyether polyols, optionally, in the presence of an internal mold release agent, a surfactant and a filler.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 4 OF 33 USPATFULL on STN

ACCESSION NUMBER: 2002:109128 USPATFULL

TITLE: Polyurethane compositions made from hydroxy-terminated

polydiene polymers

INVENTOR(S): St. Clair, David John, 13831 Queensbury, Houston, TX,

United States 77079

NUMBER KIND DATE PATENT INFORMATION: US 6388010 B1 20020514 US 2000-491017 20000125 (9)

APPLICATION INFO.:

RELATED APPLN. INFO.: Division of Ser. No. US 1998-73666, filed on 6 May

1998, now patented, Pat. No. US 6060560

NUMBER DATE PRIORITY INFORMATION: US 1997-47551P 19970523 (60) DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Buttner, David J.
NUMBER OF CLAIMS: 6

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s) LINE COUNT: 1852

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention provides a process for producing a polyurethane resin from a hydrogenated polydiene diol or polyol having a functional group equivalent weight of 750 to 10000, a reinforcing agent having a functional group equivalent weight of 30 to 200, and a polyisocyanate. In a preferred embodiment, the process comprises reacting at least one of a polydiene diol or a reinforcing diol or triol with the polyisocyanate at an NCO/functional group molar ratio of 0.4 to 0.7 or a functional group/NCO molar ratio of 0.25 to 0.55 to form a stable reaction product, adding to this reaction product an additional sufficient amount of the polyisocyanate and, as needed, one

or both of the polydiene diol or the reinforcing agent to bring the NCO/functional group ratio up to from 0.9 to 1.1 and to achieve a polydiene diol content of 35 to 80%w (on solids basis) and a reinforcing agent content of 2 to 17%w (on solids basis), and reacting

this final mixture to form a crosslinked polyurethane product. This process can also be carried out at an OH/NCO ratio of 0.9 to 1.1 using a blocked polyisocyanate wherein the intermediate reaction

product is a stable polyurethane resin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 5 OF 33 USPATFULL on STN ACCESSION NUMBER: 2000:57854 USPATFULL

TITLE: Polyurethane compositions made from hydroxy-terminated

INVENTOR(S): 5t. Clair, David John, Houston, TX, United States
PATENT ASSIGNEE(S): 5hell Oil Company, Houston, TX, United States (U.S.

corporation)

NUMBER KIND DATE

NUMBER DATE

PATENT INFORMATION: US 6060560 20000509 US 1998-73666 APPLICATION INFO.: 19980506 (9)

PRIORITY INFORMATION: US 1997-47551P 19970523 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted
PRIMARY EXAMINER: Buttner, David

LEGAL REPRESENTATIVE: Haas, Donald F. NUMBER OF CLAIMS: 27

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s) LINE COUNT: 2129

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention provides a process for producing a polyurethane resin from a hydrogenated polydiene diol or polyol having a functional group equivalent weight of 750 to 10000, a reinforcing agent having a

functional group equivalent weight of 30 to 200, and a polyisocyanate. In a preferred embodiment, the process comprises reacting at least one of a polydiene diol or a reinforcing diol or triol with the

polvisocvanate at an NCO/functional group molar ratio of 0.4 to 0.7 or a functional group/NCO molar ratio of 0.25 to 0.55

to form a stable reaction product, adding to this reaction product an additional sufficient amount of the polyisocyanate and, as needed, one or both of the polydiene diol or the reinforcing agent to bring the NCO/functional group ratio up to from 0.9 to 1.1 and to

achieve a polydiene diol content of 35 to 80% w (on solids basis) and a reinforcing agent content of 2 to 17% w (on solids basis), and reacting this final mixture to form a crosslinked polyurethane product. This process can also be carried out at an OH/NCO ratio of 0.9 to

1.1 using a blocked polvisocvanate wherein the intermediate reaction product is a stable polyurethane resin.

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 6 OF 33 USPATFULL on STN

ACCESSION NUMBER: 1998:72697 USPATFULL

Method of producing gaskets from polyurethane/urea TITLE:

compositions and gaskets produced therefrom Cageao, Ronald A., Beaver, PA, United States Meltzer, A. Donald, Brecksville, OH, United States

Suddaby, Brian R., Pittsburgh, PA, United States Bayer Corporation, Pittsburgh, PA, United States (U.S. PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE \_\_\_\_\_\_

PATENT INFORMATION: US 5770674 19980623 APPLICATION INFO:: US 1996-744037 19961105 (8)

RELATED APPLN. INFO .: Continuation-in-part of Ser. No. US 1995-484402, filed

on 7 Jun 1995, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted
PRIMARY EXAMINER: Sergent, Rabon

LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise

NUMBER OF CLAIMS: 15

INVENTOR(S):

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

5 Drawing Figure(s); 4 Drawing Page(s)

TIME COUNT: 1633

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to a method of forming a gasket around a substrate from a novel polyurethane/urea composition via the RIM process. Window gaskets may be produced by this method. These novel polyurethane/urea compositions comprise the reaction product of a (cyclo)aliphatic polyisocyanate having a viscosity of less than about 25,000 mPa.multidot.s at 25° C. and a NCO functionality of 2.0 to 4.0 with an isocyanate-reactive component comprising b1) a relatively high molecular weight organic compound containing hydroxyl groups, amine groups, or mixtures thereof; and b2) a low molecular weight chain extender selected from the group consisting of diols, primary amines, secondary amines, aminoalcohols, and mixtures thereof; in the presence of a catalyst. The isocyanate and isocyanate-reactive components are selected such that the crosslinking density of the resultant polyurethane/urea composition is at least 0.3 moles/kg. It is also possible that the isocyanate-reactive component comprises b3) a low molecular weight chain terminator, and/or b4) a low molecular weight crosslinking agent. When either or both of these components are included in the isocyanate-reactive component, A, b1), b2), and/or b3) and/or b4) must be selected such that the crosslinking density of the resultant polyurethane/urea composition is at least 0.3 moles/kg.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 7 OF 33 USPATFULL on STN

ACCESSION NUMBER: 1998:7110 USPATFULL

TITLE: Polydiene diols in resilient polyurethane foams INVENTOR(S): Hernandez, Hector, Houston, TX, United States PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S.

corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5710192 19980120 APPLICATION INFO:: US 1996-724940 19961002 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Cooney, Jr., John M.

LEGAL REPRESENTATIVE: Steinberg, Beverlee G. NUMBER OF CLAIMS: 20

EXEMPLARY CLAIM: 1 LINE COUNT: 477

CAS INDEXING IS AVAILABLE FOR THIS PATENT. AB

Polyurethane foams having high resilience, significantly improved humid aging, excellent tear strength, and light color are formed from a polydiene diol, preferably a hydrogenated polybutadiene diol, having a hydroxyl functionality from 1.6 to 2.0 and from an aromatic polyisocyanate having an isocyanate functionality of from 1.8 to 2.5. The polydiene diol is preferably blended with foaming agents prior to addition of the highly reactive polyisocyanate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 8 OF 33 USPATFULL on STN

ACCESSION NUMBER: 93:69964 USPATFULL

TITLE: Cyclohexanedimethanoladipate based prepolymers and reaction injection molded products made therefrom

INVENTOR(S): Mafoti, Robson, Pittsburgh, PA, United States PATENT ASSIGNEE(S): Miles Inc., Pittsburgh, PA, United States (U.S.

corporation)

NUMBER KIND DATE -----US 5239038 19930824 US 1989-442805 19891129 PATENT INFORMATION: APPLICATION INFO.: 19891129 (7) DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Kight, III, John
ASSISTANT EXAMINER: Truong, Duc

LEGAL REPRESENTATIVE: Gil, Joseph C., Akorli, Godfried R. NUMBER OF CLAIMS:

EXEMPLARY CLAIM: LINE COUNT: 600

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to a polvisocvanate prepolymer

prepared by reacting an isocyanate based on 4,4-methylenebis(phenyl isocyanate) and a polyester polyol by reacting 1,4-cyclohexanedimethanol and adipic acid. The invention is also directed to a RIM process using such prepolymers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 9 OF 33 USPATFULL on STN

ACCESSION NUMBER: 93:48632 USPATFULL TITLE: Polyurea rim systems

Slack, William E., Moundsville, WV, United States INVENTOR(S): Kratz, Mark R., Hannibal, OH, United States PATENT ASSIGNEE(S): Miles Inc., Pittsburgh, PA, United States (U.S.

corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5219973 19930615
APPLICATION INFO:: US 1990-623469 19901207 (7)
DOCUMENT TYPE: Utility

OCCUMENT TYPE: Utility
FILE SEGMENT: Granted
FRIMARY EXAMINER: Kight, III, John
ASSISTANT EXAMINER: Truong, Duc
LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise

NUMBER OF CLAIMS: 14 NUMBER OF CLAIM: 1
EXEMPLARY CLAIM: 1
741

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to a RIM process and an isocyanate reactive composition for use therein. The isocvanate composition includes an amine terminated chain extender and an aromatic amine terminated polyether of the formula: ##STR1## wherein R is an n-valent group obtained by the removal of hydroxyl groups from an n-hydroxy group containing polyhydroxyl compound having a molecular weight of from about 300 to about 12,000,

R.sub.1 represents hydrogen or an inert substituent,

R.sub.2 represents hydrogen, an amine group, or an inert substituent, and

n represents an integer from 2 to 4.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 10 OF 33 USPATFULL on STN

ACCESSION NUMBER: 92:78648 USPATFULL

TITLE: Polyurea rim systems having improved flow properties

and containing an organic cyclic carbonate INVENTOR(S): Nodelman, Neil H., Pittsburgh, PA, United States

KIND

PATENT ASSIGNEE(S): Miles Inc., Pittsburgh, PA, United States (U.S. NUMBER

corporation)

PATENT INFORMATION: US 5149458 19920922 US 1991-686555 APPLICATION INFO.: 19910417 RELATED APPLN. INFO.: Division of Ser. No. US 1990-546078, filed on 29 Jun

1990, now patented, Pat. No. US 5028635 which is a continuation-in-part of Ser. No. US 1990-463762, filed on 12 Jan 1990, now abandoned which is a continuation of Ser. No. US 1989-346186, filed on 4 May 1989, now abandoned which is a continuation-in-part of Ser. No.

DATE

US 1988-212751, filed on 28 Jun 1988, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Bleutge, John C. ASSISTANT EXAMINER: Krass, Frederick LEGAL REPRESENTATIVE: Gil, Joseph C.

NUMBER OF CLAIMS: 2 EXEMPLARY CLAIM: LINE COUNT: 623

CAS INDEXING IS AVAILABLE FOR THIS PATENT. AB

The present invention is directed to a RIM process and an isocvanate-reactive mixture useful therein. The mixture comprises

i) a polyether having at least two isocyanate-reactive groups and a

- molecular weight of from 1800 to 12,000 in which at least 50% of the isocyanate-reactive groups are primary and/or secondary amine groups,
- ii) an amine-terminated chain extender, and
- iii) from 2 to 20 parts by weight per 100 parts by weight of components b) and c) of propylene carbonate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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(FILE 'HOME' ENTERED AT 08:06:06 ON 17 JUL 2008)

FILE '1MOBILITY, 2MOBILITY, ALUMINIUM, ANTE, APOLLIT, BABS, CAPLUS, CBNB,

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CEABA-VTB, CERAB, CIN, CIVILENG, COMPENDEX, COPPERLIT, CORROSION, DKF,
     EMA, ENERGY, HEALSAFE, IFIPAT, INSPEC, INSPHYS, MATBUS, MDF, MECHENG,
     METADEX, MSDS-CCOHS, MSDS-OHS, PASCAL, ... 'ENTERED AT 08:07:07 ON 17 JUL
     2008
           4054 S FLEXIBLE (L) POLYURETHANE (L) DIOL (L) TRIOL
L2
              0 S L1 (L) HYDRODROFORMYLATION (L) RANEY (2W) NICKEL
L3
             8 S L1 (L) HYDROFORMYLATION (L) (RANEY (2W) NICKEL)
L4
             57 S L1 (L) (RANEY (2W) NICKEL)
            49 S L4 NOT L3
L5
L6
            45 S L5 AND RATIO
L7
             33 S L6 AND (ETHANOL OR METHANOL OR PROPANOL)
=> 11 and foam
L1 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).
=> s 11 and foam
L8
         2442 L1 AND FOAM
=> s 18 and (raney (2w) nickel) and ratio
 41 FILES SEARCHED...
            54 L8 AND (RANEY (2W) NICKEL) AND RATIO
=> s 19 and (methanol or ethanol or propanol)
           42 L9 AND (METHANOL OR ETHANOL OR PROPANOL)
=> s 110 not 13
L11
           36 L10 NOT L3
=> d 111 1-10 ibib abs
L11 ANSWER 1 OF 36 USPATFULL on STN
ACCESSION NUMBER:
                       2007:201150 USPATFULL
TITLE:
                        Bioplastics, monomers thereof, and processes for the
                        preparation thereof from agricultural feedstocks
INVENTOR(S):
                        Narine, Suresh, Alberta, CANADA
                        Sporns, Peter, Alberta, CANADA
                        Yue, Jin, Alberta, CANADA
                            NUMBER KIND DATE
PATENT INFORMATION:
                       US 20070175793 A1 20070802
US 2007-649620 A1 20070104 (11)
APPLICATION INFO.:
                              NUMBER DATE
PRIORITY INFORMATION:
                       US 2006-755770P 20060104 (60)
DOCUMENT TYPE:
                       Utility
FILE SEGMENT:
                       APPLICATION
LEGAL REPRESENTATIVE: DANN, DORFMAN, HERRELL & SKILLMAN, 1601 MARKET STREET,
                       SUITE 2400, PHILADELPHIA, PA, 19103-2307, US
NUMBER OF CLAIMS:
                       40
EXEMPLARY CLAIM:
NUMBER OF DRAWINGS:
                      87 Drawing Page(s)
LINE COUNT:
                       3864
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CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates generally to polymers and monomers derived AB from agricultural feedstocks, and more particularly to methods for the production of monomers from renewable agricultural resources such as feedstocks, for example canola, flax and tallow, and polymers, in particular polyurethanes produced from monomers derived from such feedstocks. The present invention also relates to novel processes for the production of short-chain alcohols, as well as hydroxyl wax esters, from renewable feedstocks. An improved apparatus for carrying out ozonolysis reactions is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 2 OF 36 USPATFULL on STN

ACCESSION NUMBER: 2005:264715 USPATFULL

TITLE: Activatable material and method of forming and using

INVENTOR(S): Kassa, Abraham, Shelby Township, MI, UNITED STATES Harthcock, Matthew, Oakland Township, MI, UNITED STATES

Sendijarevic, Aisa, Troy, MI, UNITED STATES

Sendijarevic, Vahid, Troy, MI, UNITED STATES L&L Products, Inc., Romeo, MI, UNITED STATES (U.S. PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE PATENT INFORMATION: US 20050230027 A1 20051020 US 2005-89712 A1 20050325 (11) APPLICATION INFO.:

> DATE NUMBER \_\_\_\_\_

PRIORITY INFORMATION: US 2004-622442P 20041027 (60) US 2004-562663P 20040415 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: DOBRUSIN & THENNISCH PC, 29 W LAWRENCE ST, SUITE 210,

PONTIAC, MI, 48342, US 2.0

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

4 Drawing Page(s) LINE COUNT: 1354

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

An activatable material and articles incorporating the same is disclosed. The activatable material includes an isocyanate and an isocyanate reactive compound. The isocyanate is typically blocked such that the activatable material is non-reactive at temperatures below about 100° C. The activatable material is preferably used for sealing, baffling, reinforcing, adhering, sound attenuation, sound damping or the like of an article of manufacture such as an automotive vehicle.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 3 OF 36 USPATFULL on STN

ACCESSION NUMBER: 2003:325213 USPATFULL

TITLE: HIGH PERFORMANCE RIM ELASTOMERS AND A PROCESS FOR THEIR

PRODUCTION

INVENTOR(S): Super, Michael S., Oakdale, PA, UNITED STATES

Steppan, David D., Gibsonia, PA, UNITED STATES Slack, William E., Moundsville, WV, UNITED STATES Potts, Bruce H., Beaver, PA, UNITED STATES

Hurley, Michael F., Pittsburgh, PA, UNITED STATES

NUMBER KIND DATE US 20030229195 A1 20031211 US 6765080 B2 20040720 US 2002-165297 A1 20020606 (10) PATENT INFORMATION: APPLICATION INFO.: DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: BAYER POLYMERS LLC, 100 BAYER ROAD, PITTSBURGH, PA,

15205 NUMBER OF CLAIMS: 26

EXEMPLARY CLAIM: LINE COUNT: 1305

CAS INDEXING IS AVAILABLE FOR THIS PATENT. AR

This invention relates to high performance RIM (reaction injection molded) poly(urethane)urea elastomers, and to a process for their production. These elastomers comprise the reaction product of an allophanate-modified diphenylmethane diisocyanate prepolymer having an NCO group content of about 5 to about 30%, with an isocyanate-reactive component comprising a high molecular weight amine-terminated polyether polyol, an aromatic diamine chain extender, and, optionally, a chain extender or crosslinker selected from the group consisting of aliphatic amine terminated polyether polyols and aliphatic hydroxyl terminated polyether polyols, optionally, in the presence of an internal mold release agent, a surfactant and a filler.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 4 OF 36 USPATFULL on STN

ACCESSION NUMBER: 2002:109128 USPATFULL

TITLE: Polyurethane compositions made from hydroxy-terminated polydiene polymers

INVENTOR(S): St. Clair, David John, 13831 Queensbury, Houston, TX, United States 77079

NUMBER KIND DATE US 6388010 B1 20020514 US 2000-491017 20000125 PATENT INFORMATION:

APPLICATION INFO.: 20000125 (9) RELATED APPLN. INFO.: Division of Ser. No. US 1998-73666, filed on 6 May

1998, now patented, Pat. No. US 6060560

NUMBER DATE

PRIORITY INFORMATION: US 1997-47551P 19970523 (60) DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED PRIMARY EXAMINER: Buttner, David J.

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT: 1852 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention provides a process for producing a polyurethane resin from a hydrogenated polydiene diol or polyol having a functional group equivalent weight of 750 to 10000, a reinforcing agent having a functional group equivalent weight of 30 to 200, and a polyisocyanate. In a preferred embodiment, the process comprises reacting at least one of a polydiene diol or a reinforcing diol or triol with the polvisocvanate at an NCO/functional group molar ratio of 0.4 to 0.7 or a functional group/NCO molar ratio of 0.25 to 0.55 to form a stable reaction product, adding to this reaction product an additional sufficient amount of the polyisocyanate and, as needed, one or both of the polydiene diol or the reinforcing agent to bring the NCO/functional group ratio up to from 0.9 to 1.1 and to achieve a polydiene diol content of 35 to 80%w (on solids basis) and a reinforcing agent content of 2 to 17%w (on solids basis), and reacting this final mixture to form a crosslinked polyurethane product. This process can also be carried out at an OH/NCO ratio of 0.9 to 1.1 using a blocked polyisocyanate wherein the intermediate reaction product is a stable polyurethane resin.

### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 5 OF 36 USPATFULL on STN

ACCESSION NUMBER: 2000:57854 USPATFULL

TITLE: Polyurethane compositions made from hydroxy-terminated

polydiene polymers

INVENTOR(S): St. Clair, David John, Houston, TX, United States

PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S. corporation)

NUMBER KIND DATE US 6060560 PATENT INFORMATION: 20000509 APPLICATION INFO.: US 1998-73666 19980506 (9)

NUMBER DATE PRIORITY INFORMATION: US 1997-47551P 19970523 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: Buttner, David

LEGAL REPRESENTATIVE: Haas, Donald F.

NUMBER OF CLAIMS: 27 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT: 2129

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides a process for producing a polyurethane resin from a hydrogenated polydiene diol or polyol having a functional group equivalent weight of 750 to 10000, a reinforcing agent having a functional group equivalent weight of 30 to 200, and a polvisocvanate. In a preferred embodiment, the process comprises reacting at least one of a polydiene diol or a reinforcing diol or triol with the

polyisocyanate at an NCO/functional group molar ratio of 0.4 to 0.7 or a functional group/NCO molar ratio of 0.25 to 0.55

to form a stable reaction product, adding to this reaction product an additional sufficient amount of the polyisocyanate and, as needed, one

or both of the polydiene diol or the reinforcing agent to bring the NCO/functional group ratio up to from 0.9 to 1.1 and to achieve a polydiene diol content of 35 to 80% w (on solids basis) and a reinforcing agent content of 2 to 17% w (on solids basis), and reacting this final mixture to form a crosslinked polyurethane product. This process can also be carried out at an OH/NCO ratio of 0.9 to 1.1 using a blocked polvisocvanate wherein the intermediate reaction product is a stable polyurethane resin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 6 OF 36 USPATFULL on STN

ACCESSION NUMBER: 1998:72697 USPATFULL

TITLE: Method of producing gaskets from polyurethane/urea

compositions and gaskets produced therefrom INVENTOR(S): Cageao, Ronald A., Beaver, PA, United States

Meltzer, A. Donald, Brecksville, OH, United States Suddaby, Brian R., Pittsburgh, PA, United States

Bayer Corporation, Pittsburgh, PA, United States (U.S. PATENT ASSIGNEE(S):

corporation)

KIND DATE NUMBER US 5770674 19980623 US 1996-744037 19961106 PATENT INFORMATION: APPLICATION INFO.:

19961105 (8) RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-484402, filed

on 7 Jun 1995, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: Sergent, Rabon

LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise

NUMBER OF CLAIMS: 15 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 5 Drawing Figure(s); 4 Drawing Page(s)

LINE COUNT: 1633

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to a method of forming a gasket around a substrate from a novel polyurethane/urea composition via the RIM process. Window gaskets may be produced by this method. These novel polyurethane/urea compositions comprise the reaction product of a (cyclo)aliphatic polyisocyanate having a viscosity of less than about 25,000 mPa.multidot.s at 25° C. and a NCO functionality of 2.0 to 4.0 with an isocyanate-reactive component comprising b1) a relatively high molecular weight organic compound containing hydroxyl groups, amine groups, or mixtures thereof; and b2) a low molecular weight chain extender selected from the group consisting of diols, primary amines, secondary amines, aminoalcohols, and mixtures thereof; in the presence of a catalyst. The isocyanate and isocyanate-reactive components are selected such that the crosslinking density of the resultant polyurethane/urea composition is at least 0.3 moles/kg. It is also possible that the isocvanate-reactive component comprises b3) a low molecular weight chain terminator, and/or b4) a low molecular weight crosslinking agent. When either or both of these components are included in the isocyanate-reactive component, A, b1), b2), and/or b3) and/or b4) must be selected such that the crosslinking density of the resultant polyurethane/urea composition is at least 0.3 moles/kg.

NUMBER KIND DATE

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 7 OF 36 USPATFULL on STN

ACCESSION NUMBER: 1998:7110 USPATFULL

Polydiene diols in resilient polyurethane foams TITLE: INVENTOR(S): Hernandez, Hector, Houston, TX, United States PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S.

corporation)

\_\_\_\_\_\_\_\_\_\_ US 5710192 PATENT INFORMATION: US 5710192 US 1996-724940 19980120 APPLICATION INFO.: 19961002 (8)

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Cooney, Jr., John M.

LEGAL REPRESENTATIVE: Steinberg, Beverlee G. NUMBER OF CLAIMS: 20

EXEMPLARY CLAIM: LINE COUNT: 477

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Polyurethane foams having high resilience, significantly improved humid aging, excellent tear strength, and light color are formed from a polydiene diol, preferably a hydrogenated polybutadiene diol, having a hydroxyl functionality from 1.6 to 2.0 and from an aromatic polyisocyanate having an isocyanate functionality of from 1.8 to 2.5. The polydiene diol is preferably blended with foaming agents

prior to addition of the highly reactive polyisocyanate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 8 OF 36 USPATFULL on STN

ACCESSION NUMBER: 96:87650 USPATFULL

TITLE: Hydroxy-functional triamine catalyst compositions for

the production of polyurethanes

INVENTOR(S): Klotz, Herbert C., Allentown, PA, United States Lassila, Kevin R., Allentown, PA, United States Listemann, Mark L., Whitehall, PA, United States Minnich, Kristen E., Allentown, PA, United States

Savoca, Ann C. L., Bernville, PA, United States PATENT ASSIGNEE(S): Air Products and Chemicals, Inc., Allentown, PA, United

States (U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5559161 APPLICATION INFO.: US 1994-198925 19960924 APPLICATION INFO.: 19940218 (8)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

FILE SEGMENT: Granted
PRIMARY EXAMINER: Seidleck, James J.
ASSISTANT EXAMINER: Truong, Duc
LEGAL REPRESENTATIVE: Leach, Michael, Marsh, William F. NUMBER OF CLAIMS: 22

EXEMPLARY CLAIM: LINE COUNT: 598

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for preparing a polyurethane foam which comprises

reacting an organic polyisocyanate and a polyol in the presence of a blowing agent, a cell stabilizer and a catalyst composition consisting essentially of a compound of structure I ##STRI## wherein R is hydrogen, a C.sub.1 -C.sub.4 alkyl, C.sub.6 -C.sub.8 aryl, or C.sub.7 -C.sub.9 aralkyl group; and

n is 1 to 8

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 9 OF 36 USPATFULL on STN

ACCESSION NUMBER: 96:36599 USPATFULL

TITLE: Hydroxy and amino functional pyrrolizidine catalyst compositions for the production of polyurethanes

Carr, Richard V. C., Allentown, PA, United States INVENTOR(S): Lassila, Kevin R., Allentown, PA, United States Listemann, Mark L., Whitehall, PA, United States Mercando, Lisa A., Pennsburg, PA, United States

Minnich, Kristen E., Allentown, PA, United States Savoca, Ann C. L., Bernville, PA, United States Wressell, Amy L., Allentown, PA, United States

Air Products and Chemicals, Inc., Allentown, PA, United PATENT ASSIGNEE(S): States (U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5512603 19960430 US 1994-199396 19940222 (8) APPLICATION INFO.:

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Seidleck, James J. ASSISTANT EXAMINER: Sergent, Rabon

LEGAL REPRESENTATIVE: Leach, Michael, Marsh, William F.

NUMBER OF CLAIMS: 20 EXEMPLARY CLAIM: LINE COUNT: 500

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A method for preparing a polyurethane foam which comprises reacting an organic polvisocvanate and a polvol in the presence of a blowing agent, cell stabilizer and a catalyst composition consisting essentially of a pyrrolizidine of the formula: ##STR1## where R.sub.1 and R.sub.2 independently are --H, --OH, ##STR2## or --NR.sub.4 R.sub.5, R.sub.3 is hydrogen, a C.sub.1 -C.sub.12 alkyl, C.sub.5 -C.sub.6 cycloalkyl, C.sub.6 -C.sub.10 arvl, or C.sub.7 -C.sub.11 arvlalkyl group, and

R.sub.4 and R.sub.5 independently represent H, a C.sub.1 -C.sub.12 alkyl group, C.sub.5 -C.sub.10 cycloalkyl, C.sub.6 -C.sub.10 aryl, or C.sub.7 -C.sub.11 arylalkyl group, provided that at least R.sub.1 or R.sub.2 is not hydrogen.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 10 OF 36 USPATFULL on STN

ACCESSION NUMBER: 94:99905 USPATFULL

TITLE: Preparation of compact or cellular elastomers containing urethane and urea groups, and moldings

produced therefrom
INVENTOR(S): Hinz, Werner, Frank

Hinz, Werner, Frankenthal, Germany, Federal Republic of

Maletzko, Christian, Mannheim, Germany, Federal

Republic of

Becker, Johannes, Ludwigshafen, Germany, Federal

Republic of

Matzke, Guenter, Ketsch, Germany, Federal Republic of
PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Ludwigshafen, Germany, Feder

BASF Aktiengesellschaft, Ludwigshafen, Germany, Federal Republic of (non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5364852 19941115
APPLICATION INFO:: US 1993-53759 19930429 (8)

NUMBER DATE

PRIORITY INFORMATION: DE 1992-4218791 19920606

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted

PRIMARY EXAMINER: Seidleck, James J.
ASSISTANT EXAMINER: Critharis, Mary
LEGAL REPRESENTATIVE: Golota, Mary E.

NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1

LINE COUNT: 1043
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compact or cellular elastomers containing urethane and urea groups are prepared by reacting

- a) at least one organic and/or modified organic polyisocyanate
- b) at least one N-propoxylated polyoxyalkylene-polyamine containing at least 50% of secondary amino groups or a mixture of said N-propoxylated polyoxyalkylene-polyamines and polyoxyalkylene-polyamines containing 2 to 4 primary amino groups and having a molecular weight of from 1000 to 8000,
- c) at least one alkyl-substituted aromatic polyamine having a molecular weight up to 500, in the presence or absence of
- d) catalysts and, if desired,
- e) blowing agents,
- f) auxiliaries and/or
- g) additives.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 08:06:06 ON 17 JUL 2008)

FILE '1MOBILITY, 2MOBILITY, ALUMINIUM, ANTE, APOLLIT, BABS, CAPLUS, CBNB,

L1 L2

L6

L9

CEABA-VTB, CERAB, CIN, CIVILENG, COMPENDEX, COPPERLIT, CORROSION, DKF, EMA, ENERGY, HEALSAFE, IFIPAT, INSPEC, INSPHYS, MATBUS, MDF, MECHENG, METADEX, MSDS-CCOHS, MSDS-OHS, PASCAL, ... 'ENTERED AT 08:07:07 ON 17 JUL 2008 4054 S FLEXIBLE (L) POLYURETHANE (L) DIOL (L) TRIOL 0 S L1 (L) HYDRODROFORMYLATION (L) RANEY (2W) NICKEL L3 8 S L1 (L) HYDROFORMYLATION (L) (RANEY (2W) NICKEL) L4 57 S L1 (L) (RANEY (2W) NICKEL) L5 49 S L4 NOT L3 45 S L5 AND RATIO 33 S L6 AND (ETHANOL OR METHANOL OR PROPANOL) L8 2442 S L1 AND FOAM 54 S L8 AND (RANEY (2W) NICKEL) AND RATIO T-10 42 S L9 AND (METHANOL OR ETHANOL OR PROPANOL) L11 36 S L10 NOT L3 => s flexible (L) polyurethane (L) foam (L) diol (L) triol (L) mixture 28 FILES SEARCHED... 2320 FLEXIBLE (L) POLYURETHANE (L) FOAM (L) DIOL (L) TRIOL (L) MIXTUR => s 112 and (methanol or ethanol or propanol) and (ranev (2w) nickel) 41 FILES SEARCHED... 43 L12 AND (METHANOL OR ETHANOL OR PROPANOL) AND (RANEY (2W) NICKE => d 113 1-10 ibib abs L13 ANSWER 1 OF 43 USPATFULL on STN ACCESSION NUMBER: 2007:201150 USPATFULL TITLE: Bioplastics, monomers thereof, and processes for the preparation thereof from agricultural feedstocks Narine, Suresh, Alberta, CANADA INVENTOR(S): Sporns, Peter, Alberta, CANADA Yue, Jin, Alberta, CANADA NUMBER KIND DATE US 20070175793 A1 20070802 PATENT INFORMATION: APPLICATION INFO.: US 2007-649620 A1 20070104 (11) NUMBER DATE PRIORITY INFORMATION: US 2006-755770P 20060104 (60) DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION LEGAL REPRESENTATIVE: DANN, DORFMAN, HERRELL & SKILLMAN, 1601 MARKET STREET, SUITE 2400. PHILADELPHIA, PA, 19103-2307, US NUMBER OF CLAIMS: 40 EXEMPLARY CLAIM: NUMBER OF DRAWINGS: 87 Drawing Page(s) LINE COUNT: 3864 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

07/17/2008 Page 26

The present invention relates generally to polymers and monomers derived from agricultural feedstocks, and more particularly to methods for the production of monomers from renewable agricultural resources such as feedstocks, for example canola, flax and tallow, and polymers, in

particular polyurethanes produced from monomers derived from such feedstocks. The present invention also relates to novel processes for the production of short-chain alcohols, as well as hydroxyl wax esters, from renewable feedstocks. An improved apparatus for carrying out ozonolysis reactions is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 2 OF 43 USPATFULL on STN

ACCESSION NUMBER: 2006:227438 USPATFULL

TITLE: Aldehyde and alcohol compositions derived from seed

INVENTOR(S): Lysenko, Zenon, Midland, MI, UNITED STATES

Morrison, Donald L., Fort Collins, CO, UNITED STATES
Babb, David A., Lake Jackson, TX, UNITED STATES

Bouning, Donald L., South Charleston, WV, UNITED STATES Burning, Donald L., South Charleston, WV, UNITED STATES Glichrist, James H., Dunbar, WV, UNITED STATES Jouett, H. Ray, Houston, TX, UNITED STATES

Kanel, Jeffrey S., Hurricane, WV, UNITED STATES Olson, Kurt D., Cross Lanes, WV, UNITED STATES Peng, Wei-Jun, Hurricane, WV, UNITED STATES Philips, Joe D., Lake Jacksosn, TX, UNITED STATES Roesch, Brian M., Cross Lanes, WV, UNITED STATES

Sanders, Aaron W., Missouri City, TX, UNITED STATES Schrock, Alan K., Lake Jackson, TX, UNITED STATES Thomas Publikhettil J. Midland MI UNITED STATES

Thomas, Pulikkottil J., Midland, MI, UNITED STATES

PATENT INFORMATION: APPLICATION INFO.: NUMBER KIND DATE

US 20060193802 A1 20060831
US 2004-551854 A1 20040422 (10)
WO 2004-07512246 20040422

20050930 PCT 371 date

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: THE DOW CHEMICAL COMPANY, INTELLECTUAL PROPERTY

SECTION, P. O. BOX 1967, MIDLAND, MI, 48641-1967, US NUMBER OF CLAIMS: 34

NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 1 Drawing Page(s)

LINE COUNT: 1284

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

An aldehyde composition derived by hydroformylation of a transesterified seed oil and containing a mixture of formyl-substituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoformyl, greater than about 1 to less than about 65 percent diformyl, and greater than about 0.1 to less than about 10 percent triformyl-substituted fatty acids or fatty acid esters, and having a diformyl to triformyl weight ratio of greater than about 5/1; preferably, greater than about 3 to less than about 20 percent saturates; and preferably, greater than about 1 to less than about 20 percent unsaturates. An alcohol composition

derived by hydrogenation of the aforementioned aldehyde composition, containing a mixture of hydroxymethyl-substituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoalcohol (mono(hydroxymethyl)), greater than about 1 to less than about 65 percent diol (di(hydroxymethyl)), greater than about 0.1 to less than about 10 percent triol, tri(hydroxmethyl)— substituted fatty acids or fatty acid esters; preferably greater than about 3 to less than about 35 percent saturates; and preferably, less than about 10 percent unsaturates. The alcohol composition can be converted into an oligomeric polyol for use in the manufacture of polyurethane slab stock flexible foams.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 3 OF 43 USPATFULL on STN

ACCESSION NUMBER: 2005:264715 USPATFULL

TITLE: Activatable material and method of forming and using

same

INVENTOR(S): Kassa, Abraham, Shelby Township, MI, UNITED STATES
Harthcock, Matthew, Oakland Township, MI, UNITED STATES

Sendijarevic, Aisa, Troy, MI, UNITED STATES Sendijarevic, Vahid, Troy, MI, UNITED STATES

PATENT ASSIGNEE(S): L&L Products, Inc., Romeo, MI, UNITED STATES (U.S.

corporation)

NUMBER DATE

PRIORITY INFORMATION: US 2004-622442P 20041027 (60) US 2004-562663P 20040415 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: DOBRUSIN & THENNISCH PC, 29 W LAWRENCE ST, SUITE 210,

PONTIAC, MI, 48342, US

NUMBER OF CLAIMS: 20 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 4 Drawing Page(s)

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

An activatable material and articles incorporating the same is disclosed. The activatable material includes an isocyanate and an isocyanate reactive compound. The isocyanate is typically blocked such that the activatable material is non-reactive at temperatures below about 100°C. The activatable material is preferably used for sealing, baffling, reinforcing, adhering, sound attenuation, sound damping or the like of an article of manufacture such as an automotive vehicle.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 4 OF 43 USPATFULL on STN

ACCESSION NUMBER: 2003:325213 USPATFULL

TITLE: HIGH PERFORMANCE RIM ELASTOMERS AND A PROCESS FOR THEIR

PRODUCTION

Super, Michael S., Oakdale, PA, UNITED STATES INVENTOR(S): Steppan, David D., Gibsonia, PA, UNITED STATES Slack, William E., Moundsville, WV, UNITED STATES Potts, Bruce H., Beaver, PA, UNITED STATES Hurley, Michael F., Pittsburgh, PA, UNITED STATES

NUMBER KIND DATE US 20030229195 A1 20031211 US 6765080 B2 20040720 US 2002-165297 A1 20020606 (10) PATENT INFORMATION: APPLICATION INFO.:

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: BAYER POLYMERS LLC, 100 BAYER ROAD, PITTSBURGH, PA, 15205

NUMBER OF CLAIMS: 26 EXEMPLARY CLAIM: LINE COUNT: 1305

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention relates to high performance RIM (reaction injection molded) poly(urethane)urea elastomers, and to a process for their production. These elastomers comprise the reaction product of an allophanate-modified diphenylmethane diisocyanate prepolymer having an NCO group content of about 5 to about 30%, with an isocyanate-reactive component comprising a high molecular weight amine-terminated polyether polyol, an aromatic diamine chain extender, and, optionally, a chain extender or crosslinker selected from the group consisting of aliphatic amine terminated polyether polyols and aliphatic hydroxyl terminated polyether polyols, optionally, in the presence of an internal mold release agent, a surfactant and a filler.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 5 OF 43 USPATFULL on STN

ACCESSION NUMBER: 2002:109128 USPATFULL

TITLE: Polyurethane compositions made from hydroxy-terminated polvdiene polymers

INVENTOR(S): St. Clair, David John, 13831 Oueensbury, Houston, TX,

United States 77079

NUMBER KIND DATE -----PATENT INFORMATION: US 6388010 B1 20020514 APPLICATION INFO:: US 2000-491017 20000125 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1998-73666, filed on 6 May

1998, now patented, Pat. No. US 6060560

NUMBER DATE PRIORITY INFORMATION: US 1997-47551P 19970523 (60)

DOCUMENT TYPE: FILE SEGMENT: Utility GRANTED

PRIMARY EXAMINER: Buttner, David J.
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s) LINE COUNT: 1852

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention provides a process for producing a polyurethane resin from a hydrogenated polydiene diol or polyol having a functional group equivalent weight of 750 to 10000, a reinforcing agent having a functional group equivalent weight of 30 to 200, and a polvisocvanate. In a preferred embodiment, the process comprises reacting at least one of a polydiene diol or a reinforcing diol or triol with the polyisocyanate at an NCO/functional group molar ratio of 0.4 to 0.7 or a functional group/NCO molar ratio of 0.25 to 0.55 to form a stable reaction product, adding to this reaction product an additional sufficient amount of the polyisocyanate and, as needed, one or both of the polydiene diol or the reinforcing agent to bring the NCO/functional group ratio up to from 0.9 to 1.1 and to achieve a polydiene diol content of 35 to 80%w (on solids basis) and a reinforcing agent content of 2 to 17%w (on solids basis), and reacting this final mixture to form a crosslinked polyurethane product. This process can also be carried out at an OH/NCO ratio of 0.9 to 1.1 using a blocked polyisocyanate wherein the intermediate reaction product is a stable polyurethane resin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 6 OF 43 USPATFULL on STN

ACCESSION NUMBER: 2000:57854 USPATFULL

TITLE: Polyurethane compositions made from hydroxy-terminated

polydiene polymers

INVENTOR(S): St. Clair, David John, Houston, TX, United States PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 6060560 20000509

US 1998-73666 APPLICATION INFO.: 19980506 (9) NUMBER DATE

PRIORITY INFORMATION: US 1997-47551P 19970523 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: Buttner, David

LEGAL REPRESENTATIVE: Haas, Donald F. NUMBER OF CLAIMS: 27

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s) LINE COUNT: 2129

CAS INDEXING IS AVAILABLE FOR THIS PATENT. AB

This invention provides a process for producing a polyurethane resin from a hydrogenated polydiene diol or polyol having a functional group equivalent weight of 750 to 10000, a reinforcing agent having a functional group equivalent weight of 30 to 200, and a polyisocyanate. In a preferred embodiment, the process comprises reacting at least one of a polydiene diol or a reinforcing diol or triol with the polyisocyanate at an NCO/functional group molar ratio of 0.4 to 0.7 or a functional group/NCO molar ratio of 0.25 to 0.55 to form a stable reaction product, adding to this reaction product an additional

sufficient amount of the polyisocyanate and, as needed, one or both of the polydiene diol or the reinforcing agent to bring the NCO/functional group ratio up to from 0.9 to 1.1 and to achieve a polydiene diol content of 35 to 80% w (on solids basis) and a reinforcing agent content of 2 to 17% w (on solids basis), and reacting this final mixture to form a crosslinked polyurethane product. This process can also be carried out at an OR/NCO ratio of 0.9 to 1.1 using a blocked polyisocyanate wherein the intermediate reaction product is a stable polyurethane resin.

#### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 7 OF 43 USPATFULL on STN

ACCESSION NUMBER: 1999:78786 USPATFULL

TITLE: Weatherable resilient polyurethane foams

INVENTOR(S): St. Clair, David John, Houston, TX, United States
Hernandez, Hector, Houston, TX, United States

PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S.

corporation)

NUMBER DATE

PRIORITY INFORMATION: US 1997-47520P 19970523 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Foelak, Morton

LEGAL REPRESENTATIVE: Steinberg, Beverlee G.

NUMBER OF CLAIMS: 14 EXEMPLARY CLAIM: 1

LINE COUNT: 499

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

There is provided a weatherable polyurethane foam produced from a polydiene diol having a number average molecular weight from 1,000 to 20,000 and a functionality of from 1.6 to 2, an aliphatic or

cycloaliphatic polyisocyanate, and a stabilizer. The polydiene diol

foams have excellent stability under sunlight exposure.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 8 OF 43 USPATFULL on STN

ACCESSION NUMBER: 1998:72697 USPATFULL

TITLE: Method of producing gaskets from polyurethane/urea compositions and gaskets produced therefrom

INVENTOR(S): Cageao, Ronald A., Beaver, PA, United States

Meltzer, A. Donald, Brecksville, OH, United States

Suddaby, Brian R., Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Bayer Corporation, Pittsburgh, PA, United States (U.S.

corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5770674 19980623
APPLICATION INFO: US 1996-744037 19961105 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-484402, filed

on 7 Jun 1995, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Sergent, Rabon

LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise

NUMBER OF CLAIMS: 15 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 5 Drawing Figure(s); 4 Drawing Page(s)

LINE COUNT: 1633

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to a method of forming a gasket around a substrate from a novel polyurethane/urea composition via the RIM process. Window gaskets may be produced by this method. These novel polyurethane/urea compositions comprise the reaction product of a (cyclo)aliphatic polyisocyanate having a viscosity of less than about 25,000 mPa.multidot.s at 25° C. and a NCO functionality of 2.0 to 4.0 with an isocyanate-reactive component comprising b1) a relatively high molecular weight organic compound containing hydroxyl groups, amine groups, or mixtures thereof; and b2) a low molecular weight chain extender selected from the group consisting of diols, primary amines, secondary amines, aminoalcohols, and mixtures thereof; in the presence of a catalyst. The isocyanate and isocyanate-reactive components are selected such that the crosslinking density of the resultant polyurethane/urea composition is at least 0.3 moles/kg. It is also possible that the isocyanate-reactive component comprises b3) a low molecular weight chain terminator, and/or b4) a low molecular weight crosslinking agent. When either or both of these components are included in the isocyanate-reactive component, A, b1), b2), and/or b3) and/or b4) must be selected such that the crosslinking density of the resultant polyurethane/urea composition is at least 0.3 moles/kg.

# CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 9 OF 43 USPATFULL on STN

ACCESSION NUMBER: 1998:7110 USPATFULL

TITLE: Polydiene diols in resilient polyurethane foams
INVENTOR(S): Hernandez, Hector, Houston, TX, United States

PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S.

corporation)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted

PRIMARY EXAMINER: Cooney, Jr., John M. LEGAL REPRESENTATIVE: Steinberg, Beverlee G.

NUMBER OF CLAIMS: 20 EXEMPLARY CLAIM: 1 LINE COUNT: 477

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Polyurethane foams having high resilience, significantly improved humid aging, excellent tear strength, and light color are formed from a polydiene diol, preferably a hydrogenated polybutadiene diol, having a hydroxyl functionality from 1.6 to 2.0 and from an aromatic

polyisocyanate having an isocyanate functionality of from 1.8 to 2.5. The polydiene diol is preferably blended with foaming agents prior to addition of the highly reactive polyisocyanate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 10 OF 43 USPATFULL on STN

ACCESSION NUMBER: 97:45055 USPATFULL

TITLE: Hydroxy-functional triamine catalyst compositions for

polyurethane production

INVENTOR(S): Van Court Carr, Richard, Allentown, PA, United States Listemann, Mark L., Whitehall, PA, United States

Savoca, Ann C. L., Bernville, PA, United States

PATENT ASSIGNEE(S): Air Products and Chemicals, Inc., Allentown, PA, United

States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5633293		19970527	
APPLICATION INFO.:	US 1995-565518		19951130	(8)
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Gorr, Rachel			
LEGAL REPRESENTATIVE:	Leach, Michael, I	Marsh,	William F.	
NUMBER OF CLAIMS:	21			
EXEMPLARY CLAIM:	1			
LINE COUNT:	641			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A method for preparing a polyurethane foam which comprises reacting an organic polyisocyanate and a polyol in the presence of a blowing agent, a cell stabilizer and a catalyst composition consisting essentially of 0-50 mole % compound I and 50-100 mole % compound II: ##STRI## wherein R is hydrogen, a C.sub.1 -C.sub.4 alkly, C.sub.6 -C.sub.8 aryl, or C.sub.7 -C.sub.9 aralkyl group; and

n is 2 to 8.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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(FILE 'HOME' ENTERED AT 08:06:06 ON 17 JUL 2008)

FILE 'IMOBILITY, 2MOBILITY, ALUMINIUM, ANTE, APOLLIT, BABS, CAPLUS, CBNB, CEABA-VTB, CERAB, CIN, CIVILENG, COMPENDEX, COPPERLIT, CORROSION, DKF, EMA, EMERGY, HEALSAFE, IFIFAT, INSPEC, INSPHYS, MATBUS, MDF, MECHENG, METADEX, MSDS-CCOHS, MSDS-OHS, PASCAL, ...' ENTERED AT 08:07:07 ON 17 JUL 2008

```
L1 4054 S FLEXIBLE (L) POLYURETHANE (L) DIOL (L) TRIOL
L2 0 S L1 (L) HYDRODROFORMYLATION (L) RANEY (2W) NICKEL
L3 8 S L1 (L) HYDROFORMYLATION (L) (RANEY (2W) NICKEL)
L4 57 S L1 (L) (RANEY (2W) NICKEL)
L5 49 S L4 NOT L3
L6 45 S L5 AND RATIO
L7 33 S L6 AND (ETHANOL OR METHANOL OR PROPANOL)
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L8 2442 S L1 AND FOAM

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54 S L8 AND (RANEY (2W) NICKEL) AND RATIO
L9
L10
           42 S L9 AND (METHANOL OR ETHANOL OR PROPANOL)
1.11
           36 S L10 NOT L3
L12
         2320 S FLEXIBLE (L) POLYURETHANE (L) FOAM (L) DIOL (L) TRIOL (L) MIX
L13
            43 S L12 AND (METHANOL OR ETHANOL OR PROPANOL) AND (RANEY (2W) NI
=> d 113 11-20 ibib abs
L13 ANSWER 11 OF 43 USPATFULL on STN
ACCESSION NUMBER:
                      96:87650 USPATFULL
TITLE:
                       Hydroxy-functional triamine catalyst compositions for
                       the production of polyurethanes
INVENTOR(S):
                       Klotz, Herbert C., Allentown, PA, United States
                       Lassila, Kevin R., Allentown, PA, United States
                       Listemann, Mark L., Whitehall, PA, United States
                       Minnich, Kristen E., Allentown, PA, United States
                       Savoca, Ann C. L., Bernville, PA, United States
PATENT ASSIGNEE(S):
                       Air Products and Chemicals, Inc., Allentown, PA, United
                       States (U.S. corporation)
                            NUMBER KIND DATE
PATENT INFORMATION:
                       US 5559161 19960924
US 1994-198925 19940218 (8)
APPLICATION INFO.:
DOCUMENT TYPE:
                       Utility
FILE SEGMENT:
                      Granted
PRIMARY EXAMINER: Seidleck, James J.
ASSISTANT EXAMINER: Truong, Duc
                       Truong, Duc
LEGAL REPRESENTATIVE: Leach, Michael, Marsh, William F.
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM:
LINE COUNT:
                       598
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
      A method for preparing a polyurethane foam which comprises reacting an
      organic polyisocyanate and a polyol in the presence of a blowing agent,
      a cell stabilizer and a catalyst composition consisting essentially of a
      compound of structure I ##STR1## wherein R is hydrogen, a C.sub.1
      -C.sub.4 alkyl, C.sub.6 -C.sub.8 aryl, or C.sub.7 -C.sub.9 aralkyl
      group; and
      n is 1 to 8
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L13 ANSWER 12 OF 43 USPATFULL on STN
ACCESSION NUMBER:
                       96:36599 USPATFULL
TITLE:
                       Hydroxy and amino functional pyrrolizidine catalyst
                       compositions for the production of polyurethanes
                       Carr, Richard V. C., Allentown, PA, United States
INVENTOR(S):
                       Lassila, Kevin R., Allentown, PA, United States
                       Listemann, Mark L., Whitehall, PA, United States
                       Mercando, Lisa A., Pennsburg, PA, United States
                       Minnich, Kristen E., Allentown, PA, United States
                       Savoca, Ann C. L., Bernville, PA, United States
                       Wressell, Amy L., Allentown, PA, United States
```

States (U.S. corporation)

Air Products and Chemicals, Inc., Allentown, PA, United

PATENT ASSIGNEE(S):

	NUMBER	KIND	DATE			
	US 5512603		19960430			
	US 1994-199396		19940222	(8)		
DOCUMENT TYPE:	Utility					
FILE SEGMENT:	Granted					
PRIMARY EXAMINER:	Seidleck, James	J.				
ASSISTANT EXAMINER:	Sergent, Rabon					
LEGAL REPRESENTATIVE:	Leach, Michael,	Marsh,	William F.			
NUMBER OF CLAIMS:	20					
EXEMPLARY CLAIM:	1					
LINE COUNT:	500					
CAS INDEXING IS AVAILABLE FOR THIS PATENT.						
AB A method for preparing a polyurethane foam which comprises reacting an						
organic polyisoc	organic polyisocyanate and a polyol in the presence of a blowing agent,					
cell stabilizer	and a catalyst co	ompositi	on consist:	ing essentially of a		

pyrrolizidine of the formula: ##STR1## where R.sub.1 and R.sub.2 independently are --H, --OH, ##STR2## or --NR.sub.4 R.sub.5, R.sub.3 is hydrogen, a C.sub.1 -C.sub.12 alkyl, C.sub.5 -C.sub.6 cycloalkyl, C.sub.6 -C.sub.10 arvl, or C.sub.7 -C.sub.11 arvlalkyl group, and R.sub.4 and R.sub.5 independently represent H, a C.sub.1 -C.sub.12 alkyl

group, C.sub.5 -C.sub.10 cycloalkyl, C.sub.6 -C.sub.10 aryl, or C.sub.7 -C.sub.11 arylalkyl group, provided that at least R.sub.1 or R.sub.2 is not hydrogen.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 13 OF 43 USPATFULL on STN ACCESSION NUMBER: 94:99905 USPATFULL TITLE: Preparation of compact or cellular elastomers containing urethane and urea groups, and moldings produced therefrom INVENTOR(S): Hinz, Werner, Frankenthal, Germany, Federal Republic of Maletzko, Christian, Mannheim, Germany, Federal Republic of Becker, Johannes, Ludwigshafen, Germany, Federal Republic of Matzke, Guenter, Ketsch, Germany, Federal Republic of BASF Aktiengesellschaft, Ludwigshafen, Germany, Federal

PATENT ASSIGNEE(S): Republic of (non-U.S. corporation)

TATAIR

DATE

	NUMBER	KIND DATE	
PATENT INFORMATION:	US 5364852	19941115	
APPLICATION INFO.:	US 1993-53759	19930429	(8)
	NUMBER	D 3 MT	

NUMBER

NUMBER DATE PRIORITY INFORMATION: DE 1992-4218791 19920606 DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: Seidleck, James J. ASSISTANT EXAMINER: Critharis, Mary LEGAL REPRESENTATIVE: Golota, Mary E. NUMBER OF CLAIMS: 11

EXEMPLARY CLAIM:

1043

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Compact or cellular elastomers containing urethane and urea groups are prepared by reacting

- a) at least one organic and/or modified organic polvisocvanate
- b) at least one N-propoxylated polyoxyalkylene-polyamine containing at least 50% of secondary amino groups or a mixture of said N-propoxylated polyoxyalkylene-polyamines and polyoxyalkylene-polyamines containing 2 to 4 primary amino groups and having a molecular weight of from 1000 to 8000,
- c) at least one alkyl-substituted aromatic polyamine having a molecular weight up to 500, in the presence or absence of
- d) catalysts and, if desired,
- e) blowing agents,
- f) auxiliaries and/or
- q) additives.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 14 OF 43 USPATFULL on STN

ACCESSION NUMBER: TITLE:

93:69964 USPATFULL

Cyclohexanedimethanoladipate based prepolymers and reaction injection molded products made therefrom Mafoti, Robson, Pittsburgh, PA, United States

INVENTOR(S): PATENT ASSIGNEE(S):

Miles Inc., Pittsburgh, PA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5239038		19930824	
APPLICATION INFO.:	US 1989-442805		19891129	(7)
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Kight, III, John			
ASSISTANT EXAMINER:	Truong, Duc			
LEGAL REPRESENTATIVE:	Gil, Joseph C., A	Akorli,	Godfried	R.
NUMBER OF CLAIMS:	7			
EXEMPLARY CLAIM:	1			
LINE COUNT:	600			
CAS INDEXING IS AVAILAB	LE FOR THIS PATENT	Γ.		

AB The present invention is directed to a polyisocyanate prepolymer prepared by reacting an isocyanate based on 4,4-methylenebis(phenyl isocyanate) and a polyester polyol by reacting 1,4-cyclohexanedimethanol and adipic acid. The invention is also directed to a RIM process using such prepolymers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 15 OF 43 USPATFULL on STN

ACCESSION NUMBER: 93:48632 USPATFULL

Polyurea rim systems TITLE .

INVENTOR(S): Slack, William E., Moundsville, WV, United States Kratz, Mark R., Hannibal, OH, United States

PATENT ASSIGNEE(S): Miles Inc., Pittsburgh, PA, United States (U.S. corporation)

NUMBER KIND DATE ----- -----

US 5219973 US 1990-623469 PATENT INFORMATION: 19930615 APPLICATION INFO.: 19901207 (7)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Kight, III, John ASSISTANT EXAMINER: Truong, Duc

LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise NUMBER OF CLAIMS: 14

EXEMPLARY CLAIM: LINE COUNT: 741

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to a RIM process and an isocvanate

reactive composition for use therein. The isocyanate composition includes an amine terminated chain extender and an aromatic amine terminated polyether of the formula: ##STR1## wherein R is an n-valent group obtained by the removal of hydroxyl groups from an n-hydroxy group containing polyhydroxyl compound having a molecular weight of from about 300 to about 12,000,

R.sub.1 represents hydrogen or an inert substituent,

R.sub.2 represents hydrogen, an amine group, or an inert substituent, and

n represents an integer from 2 to 4.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 16 OF 43 USPATFULL on STN

ACCESSION NUMBER: 92:78648 USPATFULL

TITLE: Polyurea rim systems having improved flow properties and containing an organic cyclic carbonate

INVENTOR(S): Nodelman, Neil H., Pittsburgh, PA, United States PATENT ASSIGNEE(S): Miles Inc., Pittsburgh, PA, United States (U.S.

corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5149458 19920922 US 1991-686555 19910417 (7) APPLICATION INFO.:

Division of Ser. No. US 1990-546078, filed on 29 Jun RELATED APPLN. INFO.: 1990, now patented, Pat. No. US 5028635 which is a continuation-in-part of Ser. No. US 1990-463762, filed on 12 Jan 1990, now abandoned which is a continuation

of Ser. No. US 1989-346186, filed on 4 May 1989, now abandoned which is a continuation-in-part of Ser. No. US 1988-212751, filed on 28 Jun 1988, now abandoned

DOCUMENT TYPE: Utility

Granted

FILE SEGMENT: Granted
PRIMARY EXAMINER: Bleutge, John C.
ASSISTANT EXAMINER: Krass, Frederick

LEGAL REPRESENTATIVE: Gil, Joseph C. NUMBER OF CLAIMS: 3 EXEMPLARY CLAIM:

LINE COUNT: 623

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to a RIM process and an isocyanate-reactive mixture useful therein. The mixture comprises

i) a polyether having at least two isocyanate-reactive groups and a molecular weight of from 1800 to 12,000 in which at least 50% of the isocyanate-reactive groups are primary and/or secondary amine groups,

ii) an amine-terminated chain extender, and

iii) from 2 to 20 parts by weight per 100 parts by weight of components b) and c) of propylene carbonate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 17 OF 43 USPATFULL on STN

ACCESSION NUMBER: 92:29727 USPATEULL

TITLE: Combustion-modified polyurethane foam

Turner, Robert B., Lake Jackson, TX, United States INVENTOR(S):

Priester, Jr., Ralph D., Lake Jackson, TX, United States

Burkes, Stephen R., Lake Jackson, TX, United States

PATENT ASSIGNEE(S): The Dow Chemical Company, Midland, MI, United States

(U.S. corporation)

NUMBER KIND DATE \_\_\_\_\_\_ PATENT INFORMATION: US 5104910 19920414
APPLICATION INFO:: US 1991-637105 19910103 (7)
DOCUMENT TYPE: Utility

DOCUMENT TYPE: FILE SEGMENT: Granted

PRIMARY EXAMINER: Welsh, Maurice J.

LEGAL REPRESENTATIVE: Galbraith, Ann K.

NUMBER OF CLAIMS: 18 EXEMPLARY CLAIM:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

655

Described herein is an isocvanate-reactive compound containing at least one linkage of the formula:

--X--X--

LINE COUNT:

wherein X is independently in each occurrence --NR--, --S--, or --O--; R is independently in each occurrence hydrogen, C.sub.1-10 alkyl, aryl, or arylene; and at least one N, S, or O atom of the above formula is bonded to an aryl or arylene group. Also disclosed are isocyanate-reactive compositions containing the above compound and flexible polyurethane foams prepared therefrom.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 18 OF 43 USPATFULL on STN

ACCESSION NUMBER: 92:23268 USPATFULL

TITLE: Isocyanate terminated prepolymers and the use thereof

in a rim process

INVENTOR(S): Mafoti, Robson, Pittsburgh, PA, United States

PATENT ASSIGNEE(S): Mobay Corporation, Pittsburgh, PA, United States (U.S.

corporation)

NUMBER KIND DATE \_\_\_\_\_\_ PATENT INFORMATION: US 5098984 APPLICATION INFO.: US 1990-539100 19920324 APPLICATION INFO.: 19900615 (7)

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Kight, III, John
ASSISTANT EXAMINER: Cooney, Jr., John M.

LEGAL REPRESENTATIVE: Gil, Joseph C., Akorli, Godfried R.

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

LINE COUNT: 756 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to a novel prepolymer and the use thereof in a RIM process. The prepolymer is an isocyanate terminated prepolymer having an isocyanate group content of from about 10 to about 26% by weight, and being prepared by a process comprising:

(a) reacting a C.sub.1 to C.sub.5 alkyl acetoacetate, with a polyol having a molecular weight of from about 500 to about 6000, and a hydroxyl functionality of from 2 to 4, and

(b) reacting the resultant product with an organic di- and/or polvisocvanate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 19 OF 43 USPATFULL on STN

ACCESSION NUMBER: 91:52576 USPATFULL

TITLE: Isocvanate reactive mixture and the use thereof in the

manufacture of flexible polyurethane foams

INVENTOR(S): Milliren, Charles M., Coraopolis, PA, United States

PATENT ASSIGNEE(S): Mobay Corporation, Pittsburgh, PA, United States (U.S.

corporation)

NUMBER KIND DATE \_\_\_\_\_\_ PATENT INFORMATION: US 5028637 19910702 APPLICATION INFO:: US 1989-417934 19891006 (7) DOCUMENT TYPE: Utility

OCCOMENT TYPE: Utility
FILE SEGMENT: FILE SEGMENT: Granted
STAINT EXAMINER: Kight, III, John
Truong, Duc
LEGAL REPRESENTATIVE: Gil, Joseph C., Whalen, Lyndanne M.

NUMBER OF CLAIMS: 15

EXEMPLARY CLAIM: 1 LINE COUNT: 495

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

- AB The present invention is directed to a reactive mixture for use in preparing a flexible polyurethane foam and to the foams produced therefrom. The reactive mixture broadly comprises an isocyanate reactive composition comprising:
  - A) from more than 0 up to 3 parts by weight per 100 parts by weight of components B) and C) of an amine of the formula:

H.sub.2 N--R--NH.sub.2

where R is a C.sub.3 to C.sub.10 straight or branched alkylene group or a C.sub.4 to C.sub.15 alicyclic group,

- B) from more than 0 up to 40% by weight of a relatively high molecular weight compound containing at least two aromatically bound primary amine groups, and
- C) from 60 to less than 100% by weight of one or more polyether polyhydroxyl compounds having hydroxyl functionalities of from 2 to 3 and molecular weights of from about 1000 to about 10,000, the percents by weight of component B) and component C) totalling 100%.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 20 OF 43 USPATFULL on STN

ACCESSION NUMBER: 91:52574 USPATFULL

TITLE: Polyurea-cyclic carbonate RIM systems having improved

flow properties

INVENTOR(S): Nodelman, Neil H., Pittsburgh, PA, United States

PATENT ASSIGNEE(S): Mobay Corporation, Pittsburgh, PA, United States (U.S.

corporation)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1990-463762, filed on 12 Jan 1990, now abandoned which is a continuation of Ser. No. US 1989-346186, filed on 4 May 1989, now

abandoned which is a continuation-in-part of Ser. No. US 1988-212751, filed on 28 Jun 1988, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Kight, III, John ASSISTANT EXAMINER: Krass, Frederick LEGAL REPRESENTATIVE: Gil, Joseph C.

NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1

LINE COUNT: 633

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to a RIM process and an isocvanate-reactive mixture useful therein. The mixture comprises

 a polyether having at least two isocyanate-reactive groups and a molecular weight of from 1800 to 12,000 in which at least 50% of the isocyanate-reactive groups are primary and/or secondary amine groups,

- ii) an amine-terminated chain extender, and
- iii) from 2 to 20 parts by weight per 100 parts by weight of components b) and c) of propylene carbonate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 113 21-31 ibib aba "ABA" IS NOT A VALID FORMAT In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files. REENIER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):abs

- L13 ANSWER 21 OF 43 USPATFULL on STN
- AB The present invention is directed to a polyisocyanate comprising the reaction product of
  - (a) an isocyanate selected from the group consisting of methylenebis(phenylisocyanate), polymethylenepoly(phenylisocyanate), and mixtures thereof, and
  - (b) a polyester polyol having a hydroxyl functionality of from 2 to 3 and a molecular weight of from about 750 to about 3500, said polyester polyol prepared by reacting neopentyl glycol and adipic acid,

the isocyanate group content of said reaction product from about 14% to about 28% by weight. The invention is also directed to a RIM process using such prepolymers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

- L13 ANSWER 22 OF 43 USPATFULL on STN
- AB Elastic molded articles having a closed surface layer are made from polyurea elastomers by the reaction injection molding technique. These polyurea elastomers are prepared from a polyisocyanate in which all of the isocyanate groups are aromatically bound, a polyether and a diamine. The polyether has at least two isocyanate-reactive groups and a molecular weight from 1800 to 12,000. At least 50% of the isocyanate-reactive groups in the polyether are primary and/or secondary amino groups. The diamine has a molecular weight from 10% to 400 and primary and/or secondary aromatically bound amino groups. Known auxiliary agents and additives may also be employed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

- L13 ANSWER 23 OF 43 USPATFULL on STN
- AB Elastic molded articles having a closed surface layer are made from polyurea elastomers by the reaction injection molding technique. These polyurea elastomers are prepared from a polyisocyanate in which all of the isocyanate groups are aromatically bound, a polyether and a diamine. The polyether has at least two isocyanate-reactive groups and a molecular weight from 1800 to 12,000. At least 50% of the isocyanate-reactive groups in the polyether are pirimary and/or secondary aming groups. The diamine has a molecular weight from 108 to

- 400 and primary and/or secondary aromatically bound amino groups. Known auxiliary agents and additives may also be employed.
- CAS INDEXING IS AVAILABLE FOR THIS PATENT.
- L13 ANSWER 24 OF 43 USPATFULL on STN
- AB The present invention relates to a process for the production of polyurethane-urea or polyurea-based microcellular of foam moldings by reacting a polyisocyanate component containing aromatically bound isocyanate groups with an isocyanate-reactive component containing at least one compound which has at least three aliphatic ether groups and aliphatically bound isocyanate-reactive groups and wherein a portion of the aliphatically bound-reactive groups are amino groups which have been converted to ammonium carbamate, carbonate or bicarbonate groups.

The present invention also relates to the compounds containing aliphatic ether groups and ammonium carbamate, carbonate or bicarbonate groups, optionally in admixture with compounds containing unmodified amino groups or other known isocvanate-reactive compounds.

- CAS INDEXING IS AVAILABLE FOR THIS PATENT.
- L13 ANSWER 25 OF 43 USPATFULL on STN
- AB The present invention is directed to a process for the production of optionally cellular, polyurethane and/or polyurethane-urea moldings having an impervious skin by reacting in a closed mold a reaction mixture containing
  - (a) at least one organic polyisocyanate,
  - (b) at least one compound which has a molecular weight of about  $400\ \text{to}$   $12,000\ \text{and}$  at least two isocyanate-reactive groups, and
  - (c) optionally at least one compound which has a molecular weight of from  $32\ \text{to}\ 399$  and at least two isocyanate-reactive groups,
  - wherein before the reaction takes place a surface-improving additive (e) is added containing
  - (e1) a liquid and sedimentation-stable polymer dispersion which is produced by the free radical addition polymerization or copolymerization of one or more olefinically unsaturated monomers in a high molecular weight compound having isocyanate-reactive groups of the type mentioned in (b),

and optionally

- (e2) a metal salt of a monocarboxylic acid having at least 8 carbon atoms in the molecule  $\,$
- wherein additive (e) is used in a quantity such that about 0.01 to 3 parts by weight of polymer solids of the polymer dispersion (e1) and up to about 2 parts by weight of metal salt (e2) are incorporated per 100 parts of component (b).
- CAS INDEXING IS AVAILABLE FOR THIS PATENT.

- L13 ANSWER 26 OF 43 USPATFULL on STN
- AB Dialkyl diamines for use with polyols and polyisocyanates in cast elastomer and reaction injection molding polyurethane processes. The dialkyl diamines are prepared by nitration and reduction of dialkylbenzenes or alkylation of meta-phenylenediamine. The casteders have the following structure: #\$TRI## where R.sub.lis C.sub.l -C.sub.6 alkyl or C.sub.3 -C.sub.6 cycloalkyl and R.sub.2 is C.sub.2 -C.sub.6 alkyl or C.sub.3 -C.sub.6 cycloalkyl.

Contrary to the teachings of the prior art the novel diamines have surprisingly good reaction times to form polyurethanes with excellent physical properties. Furthermore, little or no mold release is required in RIM and other processes using the chain extenders of the invention.

- CAS INDEXING IS AVAILABLE FOR THIS PATENT.
- L13 ANSWER 27 OF 43 USPATFULL on STN
- AB The present invention is directed to a process for the production of polyurea-based microcellular moldings comprising reacting
  - (a) at least one diisocyanate or polyisocyanate containing only aromatically bound isocyanate groups,
  - $\mbox{(b)}$  at least one compound containing at least two isocyanate-reactive groups, and
  - (c) optionally the auxiliaries and additives known in polyurethane chemistry, in closed molds, components (a)—(c) being processed as a one-shot system by reaction injection molding, characterized in that component (b) comprises at least one polyether compound (b1) optionally in admixture with other isocyanate-reactive compounds and containing at least 3 aliphatically bonded ether groups and n-aliphatically bonded isocyanate-reactive groups, n standing for an integer or, statistically a fraction of from 2-4
  - (i) at least (100:n) % of the isocyanate-reactive groups present in component (b1) being aliphatically bonded primary and/or secondary amino groups,
  - (ii) at least 10 equivalent % of said amino groups being present in the form of ammonium carbamate groups having a functionality of two in the isocyanate addition reaction, of the type obtained by reacting aliphatically bonded, primary or secondary amino groups with carbon dioxide,
  - (iii) the unmodified compounds containing at least 3 ether groups having a molecular weight of from 200 to 10,000 and
  - (iv) at least 0,2 equivalent % of all isocyanate-reactive groups of the total component (b) being ammonium carbamate groups.

The present invention also relates to said compounds (b) optionally in admixture with the auxiliaries and additives known in polyurethane chemistry.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

- L13 ANSWER 28 OF 43 USPATFULL on STN
- AB A process for the production of optionally cellular molded articles with a smooth outer skin and improved surface characteristics by the reaction, inside a closed mold, of a mixture of one or more organic polyisocyanates, one or more compounds having molecular weights of from 400 to 12,000, which contain at least two isocyanate-reactive groups, chain-linking and/or chain-extending agents, and optionally, known auxiliary agents and additives used in polyurethane chemistry, characterized in that before the reaction, surface-improving additives comprising one or more polymers or copolymers of one or more olefinically-unsaturated monomers, which polymers or copolymers have molecular weights of from 200 to 50,000, are liquid at room temperature, soluble in the reaction mixture, and inert toward isocyanate groups and at least one metal salt of a monocarboxylic acid having at least 8 carbon atoms, are incorporated into the reaction mixture.
- CAS INDEXING IS AVAILABLE FOR THIS PATENT.
- L13 ANSWER 29 OF 43 USPATFULL on STN
- AB The invention is directed to a process for the production of polyether polyols having an average molecular weight of from 200 to 10,000 and an average hydroxyl functionality of from 2.0 to 7.0, comprising reacting one or more alkylene oxides, optionally successively, with a mixture of polyhydric alcohols which has been produced by reduction of the condensation products from the condensation of formaldehyde hydrate. The invention is also directed to the process for the production of polyether polyols characterized in that the mixture of polyhydric alcohols is mixed with dihydric and/or trihydric alcohols and/or monoamines or polyamines prior to alkoxylated mixtures as the isocyanate-reactive component in the production of optionally cellular polyurethane plastics.
- CAS INDEXING IS AVAILABLE FOR THIS PATENT.
- L13 ANSWER 30 OF 43 USPATFULL on STN
- AB A process for preparation of a urethane foam which comprises reacting an aromatic polyisocyanate with a polyol in the presence of a blowing agent and a catalytic amount of a compound of the formula

(CH.sub.3).sub.2 NCH.sub.2 CH.sub.2 (CH.sub.2).sub.n CH.sub.2 CH.sub.2 N(CH.sub.3).sub.2

wherein n is 4, 3, 2, 1, or 0.

- CAS INDEXING IS AVAILABLE FOR THIS PATENT.
- L13 ANSWER 31 OF 43 USPATFULL on STN
- AB This invention relates to an improved process for the production of a mixture of low molecular weight polyhydric alcohols, hydroxy aldehydes and hydroxy ketones by condensing formaldehyde hydrate in the presence of calcium hydroxide as catalyst and in the presence of compounds capable of enediol formation as co-catalyst. A formaldehyde-containing enediol formation as co-catalyst. A formaldehyde containing solution of the co-catalyst in water and, optionally, low molecular weight monohydric or polyhydric alcohols and/or relatively high molecular weight polyhydroxyl compounds is adjusted to a pH value of from 9 to 12,

preferably from 9 to 10, by the addition of calcium hydroxide at a temperature of from 80° to 110° C., preferably from 90° to 105° C., so that condensation of the formaldehyde hydrate is initiated. An aqueous formalin solution and/or paraformaldehyde dispersion containing from 20 to 65%, by weight, of formaldehyde and calcium hydroxide are then introduced in such a quantity that the reaction mixture is maintained at a pH value of from 7.5 to 9.5, preferably from 8 to 9, at a temperature of from 80° to 110° C., preferably from 90° to 105° C. The concentration of formaldehyde is maintained at from 0.5 to 10%, by weight, preferably from 1.2 to 6%, by weight, based on the reaction mixture as a whole, throughout the condensation reaction. Finally, the residual quantity of formaldehyde, amounting to from 0.5 to 10%, by weight, is optionally removed by further condensation at pH values below 7 or by reaction with other compounds that are reactive with formaldehyde hydrate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

## => d 113 32-43 ibib abs

L13 ANSWER 32 OF 43 USPATFULL on STN

ACCESSION NUMBER: 79:26205 USPATEULL

TITLE: Process for the production of low molecular weight

polyhydroxyl compounds

INVENTOR(S): Muller, Hanns P., Leverkusen, Germany, Federal Republic

Wagner, Kuno, Leverkusen, Germany, Federal Republic of Bayer Aktiengesellschaft, Leverkusen, Germany, Federal PATENT ASSIGNEE(S):

Republic of (non-U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 4156636 19790529 APPLICATION INFO.: US 1978-934567 19780817 (5)

NUMBER DATE

PRIORITY INFORMATION: DE 1977-2738512 19770826

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Evans, Joseph E.

LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C.

NUMBER OF CLAIMS: 11 LINE COUNT: 898

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Low molecular weight polyhydroxyl compounds are made from formaldehyde hydrate by an improved process comprising adjusting the pH of an aqueous solution of formaldehyde and co-catalyst to 9-12 with calcium hydroxide at 80°-110° C. to begin condensation and then adding to this reaction mixture aqueous formalin and/or paraformaldehyde and calcium hydroxide to maintain a pH of 7.5-9.5 and temperature of 80°-110° C.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 33 OF 43 USPATFULL on STN ACCESSION NUMBER: 78:59947 USPATFULL

TITLE: Catalyst systems containing dimethylamino ether

mono-ols for polyurethane foam formation

INVENTOR(S): Sandner, Michael Ray, Chappaqua, NY, United States Duffy, Robert Donovan, Summersville, WV, United States

PATENT ASSIGNEE(S): Union Carbide Corporation, New York, NY, United States

(U.S. corporation)

NUMBER KIND DATE US 1977-819331 PATENT INFORMATION: 19781024 APPLICATION INFO.: 19770727 (5)

RELATED APPLN. INFO.: Division of Ser. No. US 1975-581745, filed on 29 May

1975, now patented, Pat. No. US 4049931

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Garvin, Patrick LEGAL REPRESENTATIVE: Klosty, Marylin

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

LINE COUNT: 2964

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Cellular urethane polymers are provided by effecting the reaction of an organic polyol reactant comprising a polyether polyol and an organic polyisocyanate reactant in the presence of a blowing agent and a catalyst system comprising a tertiary-dimethylamino ether mono-ol. In the dimethylamino ether mono-ols employed as catalysts in the practice of the invention, the tertiary-dimethylamino group and the hydroxyl group are positioned beta to a common acyclic ether oxygen atom or to different acyclic ether oxygen atoms which in turn are positioned beta to one another. The said dimethylamino ether mono-ols are versatile, low odor catalysts and are useful in forming cellular urethane polymers ranging from all water-blown flexible polyether foam to all fluorocarbon-blown rigid foam including semi-flexible and high-resilience foam products. Especially preferred for use in the practice of the invention are 2-(2-dimethylaminoethoxy)ethanol and 2-[2-(2-dimethylaminoethoxy)ethoxylethanol either as such or in combination with other catalysts including other tertiary-amine components and/or organic compounds of tin. Also provided are blended catalyst systems comprising said dimethylamino ether mono-ols.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 34 OF 43 USPATFULL on STN

ACCESSION NUMBER: 77:51315 USPATFULL

TITLE: Catalyst systems containing dimethylamino ether

mono-ols for polyurethane foam formation

INVENTOR(S): Sandner, Michael Ray, Chappaqua, NY, United States Duffy, Robert Donovan, Summersville, WV, United States

Union Carbide Corporation, New York, NY, United States PATENT ASSIGNEE(S):

(U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 4049931 19770920

APPLICATION INFO.: US 1975-581745 19750529 (5)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted

PRIMARY EXAMINER: Czaja, Donald E. ASSISTANT EXAMINER: Fletcher, H. H.

ASSISTANT EXAMINER: Fletcher, H. H. LEGAL REPRESENTATIVE: Klosty, Marylin

NUMBER OF CLAIMS: 50 EXEMPLARY CLAIM: 1 LINE COUNT: 3171

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Cellular urethane polymers are provided by effecting the reaction of an organic polyol reactant comprising a polyether polyol and an organic polyisocyanate reactant in the presence of a blowing agent and a catalyst system comprising a tertiary-dimethylamino ether mono-ol. In the dimethylamino ether mono-ols employed as catalysts in the practice of the invention, the tertiary-dimethylamino group and the hydroxyl group are positioned beta to a common acyclic ether oxygen atom or to different acyclic ether oxygen atoms which in turn are positioned beta to one another. The said dimethylamino ether mono-ols are versatile, low odor catalysts and are useful in forming cellular urethane polymers ranging from all water-blown flexible polyether foam to all fluorocarbon-blown rigid foam including semi-flexible and high-resilience foam products. Especially preferred for use in the practice of the invention are 2-(2-dimethylaminoethoxy)ethanol and 2-[2-(2-dimethylaminoethoxy)ethoxy]ethanol either as such or in combination with other catalysts including other tertiary-amine components and/or organic compounds of tin. Also provided are blended catalyst systems comprising said dimethylamino ether mono-ols.

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 35 OF 43 USPATOLD on STN

ACCESSION NUMBER: 1974:65637 USPATOLD

TITLE: MONO AND TRIS(AMINO LOWERALKOXY) (ALKYL)

POLYOXYALKYLENE COMPOUNDS AND METHOD OF PREPARATION

INVENTOR(S): POPPELSDORF F

PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

	NUMBER	KIND	DATE
PATENT INFORMATION: APPLICATION INFO.:		Α	19740326 19671201
	NUMBER		DATE
PRIORITY INFORMATION:	US 1967-689004 US 1961-107060 US 1967-688971 US 1967-688976		19671208 19610502 19671208 19671208
DOCUMENT TYPE: FILE SEGMENT: PRIMARY EXAMINER: LINE COUNT:	Utility GRANTED		13011200
L13 ANSWER 36 OF 43 ACCESSION NUMBER: TITLE:			POUNDS

INVENTOR(S): LYNN JOHN W HENRY JOSEPH P

TRECKER DAVID J

PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

NUMBER KIND DATE US 3646132 A 19720229 US 1969-846251 19690701 PATENT INFORMATION: APPLICATION INFO.:

NUMBER DATE PRIORITY INFORMATION: US 1965-520298 19651209 US 1969-846251 US 1969-846256 19690730 19690730 DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED PRIMARY EXAMINER:

WEINBERGER, LORRAINE A ASSISTANT EXAMINER: GLEIMAN, E J

LINE COUNT: 1678

CAS INDEXING IS AVAILABLE FOR THIS PATENT. CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 37 OF 43 USPATOLD on STN

ACCESSION NUMBER: 1972:61815 USPATOLD

SYM TRIS (4 PIPERIDYL) CYCLOHEXANES TITLE:

INVENTOR(S): UELZMANN HEINZ PATENT ASSIGNEE(S): GENCORP INC.

NUMBER KIND DATE PATENT INFORMATION: US 3646041 A 19720229 APPLICATION INFO:: US 1970-7310 19700101

NUMBER DATE NOWREK PRIORITY INFORMATION: US 1970-7310 19700108

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED FILE SEGMENT: GRANTED
PRIMARY EXAMINER: JILES, HENRY R
ASSISTANT EXAMINER: TODD, G T
LINE COUNT: 749

CAS INDEXING IS AVAILABLE FOR THIS PATENT. CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 38 OF 43 USPATOLD on STN

ACCESSION NUMBER: 1971:56250 USPATOLD

TITLE: BETA CYANOALKYL ETHERS OF POLYOXYALKYLENE ADDUCTS OF

MODERATELY HIGH MOLECULAR WEIGHT

INVENTOR(S): POPPELSDORF FEDOR
PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

NUMBER KIND DATE PATENT INFORMATION: US 3560549 A 19710202
APPLICATION INFO.: US 1967-688976 19671201

	NUMBER		DATE	
PRIORITY INFORMATION:			19610502 19671208	
DOCUMENT TYPE: FILE SEGMENT: PRIMARY EXAMINER: LINE COUNT:	Utility GRANTED BRUST, JOSEPH P 1584		15071200	
L13 ANSWER 39 OF 43 ACCESSION NUMBER: TITLE:		OLD S SYM T	RIS(4 PYRIDYL) CYCLOHEXANI RIS (4 PYRIDYL) CYCLOHEXAN	ES NES
INVENTOR(S): PATENT ASSIGNEE(S):	UELZMANN HEINZ GENCORP INC.			
	NUMBER			
PATENT INFORMATION: APPLICATION INFO.:	US 3528988 US 1967-674760	A	19700915 19671001	
	NUMBER		DATE	
PRIORITY INFORMATION: DOCUMENT TYPE: FILE SEGMENT: PRIMARY EXAMINER: LINE COUNT: CAS INDEXING IS AVAILA CAS INDEXING IS AVAILA	RANDOLPH, JOHN D 768 BLE FOR THIS PATENT	r.	19671012	
L13 ANSWER 40 OF 43 ACCESSION NUMBER: TITLE: INVENTOR(S):	1970:4861 USPATO NORBORNANE DIISOO LYNN JOHN W HENRY JOSEPH P TRECKER DAVID J	OLD CYANATE	S	
PATENT ASSIGNEE(S):				
	NUMBER			
PATENT INFORMATION: APPLICATION INFO.:	US 3492330 US 1966-520298	A	19700127 19660101	
	NUMBER		DATE	
PRIORITY INFORMATION: DOCUMENT TYPE:	US 1965-520298 US 1969-846251 US 1969-846256		19651209 19690730 19690730	
DOCUMENT TYPE: FILE SEGMENT: PRIMARY EXAMINER:	Utility GRANTED PARKER, CHARLES E	3		

1827 CAS INDEXING IS AVAILABLE FOR THIS PATENT. CAS INDEXING IS AVAILABLE FOR THIS PATENT.

LINE COUNT:

L13 ANSWER 41 OF 43 USPATOLD on STN

ACCESSION NUMBER: 1966:29487 USPATOLD

TITLE: Products resulting from the reaction of carbonate

diisocyanates with active hydrogencompounds

INVENTOR(S): BROTHERTON THOMAS K

LYNN JOHN W

	NUMBER	KIND	DATE
PATENT INFORMATION: APPLICATION INFO.:	US 3256220 US 1964-413927	A	1966061 1964112

NUMBER DATE \_\_\_\_\_ PRIORITY INFORMATION: US 1964-413927 19641125

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED PRIMARY EXAMINER: BERCOVITZ

LINE COUNT: 2777

CAS INDEXING IS AVAILABLE FOR THIS PATENT. CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 42 OF 43 USPATOLD on STN

ACCESSION NUMBER: 1966:29480 USPATOLD

TITLE: Preparation of cellular isocvanatepolyamino compound

reaction products INVENTOR(S): MAXEY EDWIN M

GMITTER GEORGE T

NUMBER KIND DATE \_\_\_\_\_\_ PATENT INFORMATION: US 3256213 A 19660614

NUMBER DATE PRIORITY INFORMATION: US 1962-198765 19620531

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: BERCOVITZ, LEON L LINE COUNT: 710

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 43 OF 43 USPAT2 on STN ACCESSION NUMBER: 2003:325213 USPAT2

TITLE: High performance RIM elastomers and a process for their

production

INVENTOR(S): Super, Michael S., Oakdale, PA, United States Steppan, David D., Gibsonia, PA, United States Slack, William E., Moundsville, WV, United States

Potts, Bruce H., Beaver, PA, United States Hurley, Michael F., Pittsburgh, PA, United States

Bayer Corporation, Pittsburgh, PA, United States (U.S. PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE

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PATENT INFORMATION: US 6765080 B2 20040720 APPLICATION INFO.: US 2002-165297 20020606
                                         20020606 (10)
DOCUMENT TYPE:
                      Utility
FILE SEGMENT:
                      GRANTED
PRIMARY EXAMINER: Sergent, Rabon
LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM:
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT:
                      1256
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       This invention relates to high performance RIM (reaction injection
      molded) poly(urethane)urea elastomers, and to a process for their
      production. These elastomers comprise the reaction product of an
       allophanate-modified diphenylmethane diisocyanate prepolymer having an
      NCO group content of about 5 to about 30%, with an isocyanate-reactive
      component comprising a high molecular weight amine-terminated polyether
       polyol, an aromatic diamine chain extender, and, optionally, a chain
       extender or crosslinker selected from the group consisting of aliphatic
       amine terminated polyether polyols and aliphatic hydroxyl terminated
       polyether polyols, optionally, in the presence of an internal mold
       release agent, a surfactant and a filler.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
=> d his
     (FILE 'HOME' ENTERED AT 08:06:06 ON 17 JUL 2008)
    FILE '1MOBILITY, 2MOBILITY, ALUMINIUM, ANTE, APOLLIT, BABS, CAPLUS, CBNB,
     CEABA-VTB, CERAB, CIN, CIVILENG, COMPENDEX, COPPERLIT, CORROSION, DKF,
     EMA, ENERGY, HEALSAFE, IFIPAT, INSPEC, INSPHYS, MATBUS, MDF, MECHENG,
    METADEX, MSDS-CCOHS, MSDS-OHS, PASCAL, ... ENTERED AT 08:07:07 ON 17 JUL
     2008
          4054 S FLEXIBLE (L) POLYURETHANE (L) DIOL (L) TRIOL
L2
             0 S L1 (L) HYDRODROFORMYLATION (L) RANEY (2W) NICKEL
L3
             8 S L1 (L) HYDROFORMYLATION (L) (RANEY (2W) NICKEL)
L4
            57 S L1 (L) (RANEY (2W) NICKEL)
L5
            49 S L4 NOT L3
           45 S L5 AND RATIO
L6
L7
           33 S L6 AND (ETHANOL OR METHANOL OR PROPANOL)
1.8
         2442 S L1 AND FOAM
1.9
           54 S L8 AND (RANEY (2W) NICKEL) AND RATIO
L10
            42 S L9 AND (METHANOL OR ETHANOL OR PROPANOL)
L11
           36 S L10 NOT L3
L12
          2320 S FLEXIBLE (L) POLYURETHANE (L) FOAM (L) DIOL (L) TRIOL (L) MIX
            43 S L12 AND (METHANOL OR ETHANOL OR PROPANOL) AND (RANEY (2W) NI
L13
=> s 112 and (ranev (2w) nickel)
L14
           56 L12 AND (RANEY (2W) NICKEL)
=> s 114 and hydrogenation
           49 L14 AND HYDROGENATION
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=> d 115 1-11 ibib abs

L15 ANSWER 1 OF 49 IFIPAT COPYRIGHT 2008 IFI on STN AN 11244745 IFIPAT; IFIUDB; IFICDB

TITLE: ALDEHYDE AND ALCOHOL COMPOSITIONS DERIVED FROM SEED

OILS

INVENTOR(S): Babb; David A., Lake Jackson, TX, US

Bunning; Donald L., South Charleston, WV, US
Derstine; Christopher W., Winfield, WV, US

Gilchrist; James H., Dunbar, WV, US Jouett; H. Ray, Houston, TX, US Kanel; Jeffrey S., Hurricane, WV, US Lysenko; Zenon, Midland, MI, US

Morrison; Donald L., Fort Collins, CO, US Olson; Kurt D., Cross Lanes, WV, US Peng; Wei-Jun, Hurricane, WV, US Philips; Joe D., Lake Jacksosn, TX, US Roesch; Brian M., Cross Lanes, WV, US

Sanders; Aaron W., Missouri City, TX, US Schrock; Alan K., Lake Jackson, TX, US Thomas; Pulikkottil J., Midland, MI, US

PATENT ASSIGNEE(S): Unassigned

PATENT ASSIGNEE PROBABLE: Dow Chemical Co The (Probable)
AGENT: THE DOW CHEMICAL COMPANY, INTELLECTUAL PROPERTY

SECTION, P. O. BOX 1967, MIDLAND, MI, 48641-1967, US

WO 2004-0512246 20040422 20050930 PCT 371 date 20050930 PCT 102(e) date

NUMBER DATE

PRIORITY APPLN. INFO.: US 2003-465663P 20030425 (Provisional) FAMILY INFORMATION: US 2006193802 20060831

FAMILY INFORMATION: US 2006193802 DOCUMENT TYPE: Utility

Patent Application - First Publication
FILE SEGMENT: CHEMICAL

APPLICATION

ENTRY DATE: Entered STN: 1 Sep 2006

Last Updated on STN: 1 Sep 2006

PARENT CASE DATA:

This application claims the benefit of U.S. Provisional Patent Application Ser. No. 60/465,663, filed Apr. 25, 2003.

NUMBER OF CLAIMS: 3

AB An aldehyde composition derived by hydroformylation of a transesterified seed oil and containing a mixture of formyleubstituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoformyl, greater than about 1 to less than about 6 percent diformyl, and greater than about 0.1 to less than about 10 percent triformyl-substituted fatty acids or fatty acid esters, and having a diformyl to triformyl weight ratio of

greater than about 5/1; preferably, greater than about 3 to less than about 20 percent saturates; and preferably, greater than about 1 to less than about 20 percent unsaturates. An alcohol composition derived by hydrogenation of the aforementioned aldehyde composition, containing a mixture of hydroxymethyl-substituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoalcohol (mono(hydroxymethyl)), greater than about 1 to less than about 65 percent diol (di(hydroxymethyl)), greater than about 1 to less than about 10 percent triol, tri(hydroxmethyl)-substituted fatty acids or fatty acid esters; preferably greater than about 3 to less than about 35 percent saturates; and preferably, less than about 10 percent unsaturates. The alcohol composition can be converted into an oligomeric polyol for use in the manufacture of polyurethane slab stock flexible foams.

CLMN 34

L15 ANSWER 2 OF 49 USPATFULL on STN

ACCESSION NUMBER: 2007:201150 USPATFULL

TITLE: Bioplastics, monomers thereof, and processes for the preparation thereof from agricultural feedstocks

INVENTOR(S): Narine, Suresh, Alberta, CANADA

Sporns, Peter, Alberta, CANADA Yue, Jin, Alberta, CANADA

NUMBER DATE

PRIORITY INFORMATION: US 2006-755770P 20060104 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: DANN, DORFMAN, HERRELL & SKILLMAN, 1601 MARKET STREET,

SUITE 2400, PHILADELPHIA, PA, 19103-2307, US

NUMBER OF CLAIMS: 40 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 87 Drawing Page(s)

LINE COUNT: 3864

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates gener

The present invention relates generally to polymers and monomers derived from agricultural feedstocks, and more particularly to methods for the production of monomers from renewable agricultural resources such as feedstocks, for example canola, flax and tallow, and polymers, in particular polywrethanes produced from monomers derived from such feedstocks. The present invention also relates to novel processes for the production of short-chain alcohols, as well as hydroxyl wax esters, from renewable feedstocks. An improved apparatus for carrying out oznowlysis reactions is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 3 OF 49 USPATFULL on STN

ACCESSION NUMBER: 2007:89677 USPATFULL

TITLE: Super soft elastomers as skinning material for

composites

Ulbrich, Dagmar, Koln, GERMANY, FEDERAL REPUBLIC OF INVENTOR(S): Guether, Ralf, McDonald, PA, UNITED STATES

Bohne, Franz-Josef, Leichlingen, GERMANY, FEDERAL

REPUBLIC OF

Schutze, Marc, Dortmund, GERMANY, FEDERAL REPUBLIC OF Rosthauser, James W., Pittsburgh, PA, UNITED STATES Perry, John H., Scenery Hill, PA, UNITED STATES

NUMBER KIND DATE US 20070078253 A1 20070405 US 2005-241208 A1 20050930 (11) PATENT INFORMATION:

APPLICATION INFO.: DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: BAYER MATERIAL SCIENCE LLC, 100 BAYER ROAD, PITTSBURGH,

PA, 15205, US NUMBER OF CLAIMS: 22

EXEMPLARY CLAIM: LINE COUNT: 1148

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to soft sprayable polyurethane elastomers which exhibit low hardness without the addition of plasticizers. Other aspects of this invention are composites with a soft touch surface and processes of making these composites. These composites may also be decorative and/or pigmented composites.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 4 OF 49 USPATFULL on STN

ACCESSION NUMBER: 2006:227438 USPATFULL

TITLE: Aldehyde and alcohol compositions derived from seed

INVENTOR(S):

Lysenko, Zenon, Midland, MI, UNITED STATES Morrison, Donald L., Fort Collins, CO, UNITED STATES

Babb, David A., Lake Jackson, TX, UNITED STATES Bunning, Donald L., South Charleston, WV, UNITED STATES Derstine, Christopher W., Winfield, WV, UNITED STATES Gilchrist, James H., Dunbar, WV, UNITED STATES

Jouett, H. Ray, Houston, TX, UNITED STATES Kanel, Jeffrey S., Hurricane, WV, UNITED STATES Olson, Kurt D., Cross Lanes, WV, UNITED STATES Peng, Wei-Jun, Hurricane, WV, UNITED STATES Philips, Joe D., Lake Jacksosn, TX, UNITED STATES Roesch, Brian M., Cross Lanes, WV, UNITED STATES Sanders, Aaron W., Missouri City, TX, UNITED STATES

Schrock, Alan K., Lake Jackson, TX, UNITED STATES Thomas, Pulikkottil J., Midland, MI, UNITED STATES

NUMBER KIND DATE US 20060193802 A1 20060831 US 2004-551854 A1 20040422 (10) WO 2004-US12246 20040422 PATENT INFORMATION: APPLICATION INFO.: 20050930 PCT 371 date

NUMBER DATE

PRIORITY INFORMATION: US 2003-465663P 20030425 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: THE DOW CHEMICAL COMPANY, INTELLECTUAL PROPERTY

SECTION, P. O. BOX 1967, MIDLAND, MI, 48641-1967, US

NUMBER OF CLAIMS: 34

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 1 Drawing Page(s) LINE COUNT: 1284

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

An aldehyde composition derived by hydroformylation of a transesterified seed oil and containing a mixture of formyl-substituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoformyl, greater than about 1 to less than about 65 percent diformyl, and greater than about 0.1 to less than about 10 percent triformyl-substituted fatty acids or fatty acid esters, and having a diformyl to triformyl weight ratio of greater than about 5/1; preferably, greater than about 3 to less than about 20 percent saturates; and preferably, greater than about 1 to less than about 20 percent unsaturates. An alcohol composition derived by hydrogenation of the aforementioned aldehyde composition, containing a mixture of hydroxymethyl-substituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoalcohol

{mono(hydroxymethyl)}, greater than about 1 to less than about 65 percent diol {di(hydroxymethyl)}, greater than about 0.1 to

less than about 10 percent triol, tri(hydroxmethyl) -

substituted fatty acids or fatty acid esters; preferably greater than about 3 to less than about 35 percent saturates; and preferably, less than about 10 percent unsaturates. The alcohol composition can be converted into an oligomeric polyol for use in the manufacture of polyurethane slab stock flexible foams.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 5 OF 49 USPATFULL on STN

ACCESSION NUMBER: 2005:264715 USPATFULL

TITLE: Activatable material and method of forming and using

INVENTOR(S): Kassa, Abraham, Shelby Township, MI, UNITED STATES Harthcock, Matthew, Oakland Township, MI, UNITED STATES

Sendijarevic, Aisa, Troy, MI, UNITED STATES

Sendijarevic, Vahid, Trov, MI, UNITED STATES

PATENT ASSIGNEE(S): L&L Products, Inc., Romeo, MI, UNITED STATES (U.S.

corporation)

NUMBER KIND DATE PATENT INFORMATION: US 20050230027 A1 20051020 APPLICATION INFO:: US 2005-89712 A1 20050325 (11) APPLICATION INFO.:

NUMBER DATE

PRIORITY INFORMATION: US 2004-622442P 20041027 (60) US 2004-562663P 20040415 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: DOBRUSIN & THENNISCH PC, 29 W LAWRENCE ST, SUITE 210,

PONTIAC, MI, 48342, US

NUMBER OF CLAIMS: 20 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 4 Drawing Page(s)

LINE COUNT: 1354 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

An activatable material and articles incorporating the same is disclosed. The activatable material includes an isocyanate and an isocyanate reactive compound. The isocyanate is typically blocked such that the activatable material is non-reactive at temperatures below about 100° C. The activatable material is preferably used for sealing, baffling, reinforcing, adhering, sound attenuation, sound damping or the like of an article of manufacture such as an automotive vehicle.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 6 OF 49 USPATFULL on STN

ACCESSION NUMBER: 2003:325213 USPATFULL

TITLE: HIGH PERFORMANCE RIM ELASTOMERS AND A PROCESS FOR THEIR

PRODUCTION

INVENTOR(S): Super, Michael S., Oakdale, PA, UNITED STATES Steppan, David D., Gibsonia, PA, UNITED STATES Slack, William E., Moundsville, WV, UNITED STATES

Potts, Bruce H., Beaver, PA, UNITED STATES

Hurley, Michael F., Pittsburgh, PA, UNITED STATES

NUMBER KIND DATE \_\_\_\_\_ \_\_\_\_ PATENT INFORMATION: US 20030229195 A1 20031211 US 6765080 B2 20040720 US 2002-165297 A1 20020606 (10) APPLICATION INFO.: DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: BAYER POLYMERS LLC, 100 BAYER ROAD, PITTSBURGH, PA,

15205 NUMBER OF CLAIMS: 26 EXEMPLARY CLAIM:

LINE COUNT: 1305

CAS INDEXING IS AVAILABLE FOR THIS PATENT. AB

This invention relates to high performance RIM (reaction injection molded) poly(urethane)urea elastomers, and to a process for their production. These elastomers comprise the reaction product of an allophanate-modified diphenylmethane diisocyanate prepolymer having an NCO group content of about 5 to about 30%, with an isocyanate-reactive component comprising a high molecular weight amine-terminated polyether polyol, an aromatic diamine chain extender, and, optionally, a chain extender or crosslinker selected from the group consisting of aliphatic amine terminated polyether polyols and aliphatic hydroxyl terminated polyether polyols, optionally, in the presence of an internal mold release agent, a surfactant and a filler.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 7 OF 49 USPATFULL on STN

ACCESSION NUMBER: 2002:109128 USPATFULL

TITLE: Polyurethane compositions made from hydroxy-terminated

polydiene polymers

INVENTOR(S): St. Clair, David John, 13831 Queensbury, Houston, TX,

United States 77079

NUMBER KIND DATE ------PATENT INFORMATION: US 6388010 B1 20020514 APPLICATION INFO.: US 2000-491017 20000125 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1998-73666, filed on 6 May

1998, now patented, Pat. No. US 6060560

NUMBER DATE

PRIORITY INFORMATION: US 1997-47551P 19970523 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Buttner, David J.
NUMBER OF CLAIMS: 6

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 1852

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention provides a process for producing a polyurethane resin from a hydrogenated polydiene diol or polyol having a functional group equivalent weight of 750 to 10000, a reinforcing agent having a

functional group equivalent weight of 30 to 200, and a polyisocyanate. In a preferred embodiment, the process comprises reacting at least one of a polydiene diol or a reinforcing diol or triol with the

polyisocyanate at an NCO/functional group molar ratio of 0.4 to 0.7 or a

functional group/NCO molar ratio of 0.25 to 0.55 to form a stable reaction product, adding to this reaction product an additional

sufficient amount of the polyisocyanate and, as needed, one or both of the polydiene diol or the reinforcing agent to bring the NCO/functional group ratio up to from 0.9 to 1.1 and to achieve a polydiene diol content of 35 to 80%w (on solids basis) and a reinforcing agent content of 2 to 17%w (on solids basis), and reacting this final mixture to form a crosslinked polyurethane product. This process can also be carried out at an OH/NCO ratio of 0.9 to 1.1 using a blocked polyisocyanate wherein

the intermediate reaction product is a stable polyurethane resin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 8 OF 49 USPATFULL on STN

ACCESSION NUMBER: 2000:57854 USPATFULL TITLE: Polyurethane compositions made from hydroxy-terminated

polydiene polymers

INVENTOR(S): St. Clair, David John, Houston, TX, United States Shell Oil Company, Houston, TX, United States (U.S. PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE PATENT INFORMATION: US 6060560 20000509 APPLICATION INFO.: US 1998-73666 19980506 (9)

NUMBER DATE PRIORITY INFORMATION: US 1997-47551P 19970523 (60) DOCUMENT TYPE: Utility

FILE SEGMENT: Granted
PRIMARY EXAMINER: Buttner, David

LEGAL REPRESENTATIVE: Haas, Donald F.

NUMBER OF CLAIMS: 27 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s) LINE COUNT: 2129

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention provides a process for producing a polyurethane resin from a hydrogenated polydiene diol or polyol having a functional group equivalent weight of 750 to 10000, a reinforcing agent having a functional group equivalent weight of 30 to 200, and a polyisocyanate. In a preferred embodiment, the process comprises reacting at least one of a polydiene diol or a reinforcing diol or triol with the polyisocyanate at an NCO/functional group molar ratio of 0.4 to 0.7 or a functional group/NCO molar ratio of 0.25 to 0.55 to form a stable reaction product, adding to this reaction product an additional sufficient amount of the polyisocyanate and, as needed, one or both of the polydiene diol or the reinforcing agent to bring the NCO/functional group ratio up to from 0.9 to 1.1 and to achieve a polydiene diol content of 35 to 80% w (on solids basis) and a reinforcing agent content of 2 to 17% w (on solids basis), and reacting this final mixture to form a crosslinked polyurethane product. This process can also be carried out at an OH/NCO ratio of 0.9 to 1.1 using a blocked polyisocyanate wherein

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 9 OF 49 USPATFULL on STN

ACCESSION NUMBER: 1999:132898 USPATFULL

TITLE: Resilient polyurethane foams of polydiene diols and oil

the intermediate reaction product is a stable polyurethane resin.

INVENTOR(S): St. Clair, David John, Houston, TX, United States Hernandez, Hector, Houston, TX, United States PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S.

corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5973016
APPLICATION INFO.: US 1998-81558 19991026 19980519 (9)

NUMBER DATE PRIORITY INFORMATION: US 1997-47521P 19970523 (60)

DOCUMENT TYPE: FILE SEGMENT: Utility FILE SEGMENT: Granted
PRIMARY EXAMINER: Gorr, Rachel
LEGAL REPRESENTATIVE: Steinberg, Beverlee G. Granted

NUMBER OF CLAIMS: 16 EXEMPLARY CLAIM: LINE COUNT: 404

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

There is provided a high resilience polyurethane foam produced from a

polydiene diol having a number average molecular weight from 1,000 to 20,000 and a functionality of from 1.6 to 2, an aromatic polyisocyanate, and oil. The polydiene diol foams have excellent processability. producing high resilience foams having small cell size and uniform cell size distributions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 10 OF 49 USPATFULL on STN

ACCESSION NUMBER: 1999:78786 USPATFULL

TITLE: Weatherable resilient polyurethane foams

St. Clair, David John, Houston, TX, United States INVENTOR(S):

Hernandez, Hector, Houston, TX, United States

PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S.

corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5922781 US 1998-81559 19990713 APPLICATION INFO.: 19980519 (9)

> NUMBER DATE

PRIORITY INFORMATION: US 1997-47520P 19970523 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Foelak, Morton

LEGAL REPRESENTATIVE: Steinberg, Beverlee G.

NUMBER OF CLAIMS: 14

EXEMPLARY CLAIM:

LINE COUNT: 499

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

There is provided a weatherable polyurethane foam produced from a polydiene diol having a number average molecular weight from 1,000 to 20,000 and a functionality of from 1.6 to 2, an aliphatic or

cycloaliphatic polyisocyanate, and a stabilizer. The polydiene diol

foams have excellent stability under sunlight exposure.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 11 OF 49 USPATFULL on STN

1999:24702 USPATFULL ACCESSION NUMBER:

TITLE: Flexible foams and flexible molded foams based on

allophanate-modified diphenvlmethane diisocvanates and processes for the production of these foams

Milliren, Charles M., Coraopolis, PA, United States INVENTOR(S):

Madan, Sanjeev, Coraopolis, PA, United States Slack, William E., Moundsville, WV, United States Zibert, Ronald, Burgettstown, PA, United States

Riccitelli, Richard A., Monaca, PA, United States Miller, William E., St. Clairsville, OH, United States Bayer Corporation, Pittsburgh, PA, United States (U.S.

PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5874485 19990223

APPLICATION INFO.: US 1997-966818 19971110 (8)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted
PRIMARY EXAMINER: Gorr, Rachel

LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise NUMBER OF CLAIMS: 26

EXEMPLARY CLAIM:

1332 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention relates to flexible foams and flexible molded foams prepared from an isocyanate component comprising an allophanate-modified diphenylmethane diisocyanate. The present invention also relates to processes for the production of these flexible foams and flexible molded foams.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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'ABW' IS NOT A VALID FORMAT

In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in

individual files.

PATENT ASSIGNEE(S):

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT): ibib abs

L15 ANSWER 12 OF 49 USPATFULL on STN

ACCESSION NUMBER: 1998:157407 USPATFULL

TITLE: Resilient polyurethane foams of polydiene diols and

tackifying resin

INVENTOR(S): St. Clair, David John, Houston, TX, United States

Hernandez, Hector, Houston, TX, United States

Shell Oil Company, Houston, TX, United States (U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5849806 APPLICATION INFO.: US 1998-80997 19981215 APPLICATION INFO.: 19980519

NUMBER DATE

PRIORITY INFORMATION: US 1997-47522P 19970523 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted

FILE SEGMENT: Granted
PRIMARY EXAMINER: Foelak, Morton

LEGAL REPRESENTATIVE: Steinberg, Beverlee G.

LEGAL REPRESENTATIVE.
NUMBER OF CLAIMS: 40
EXEMPLARY CLAIM: 1
533

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

There is provided a high resilience polyurethane foam adhesive produced from a polydiene diol having a number average molecular weight from 1,000 to 20,000 and a functionality of from 1.6 to 2, an aromatic polyisocyanate, a tackifying resin and oil. In another embodiment, there is provided a polyurethane foam adhesive produced from a blend of a polydiene diol and a polydiene mono-ol, an aromatic polyisocyanate, and

a tackifying resin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 13 OF 49 USPATFULL on STN

ACCESSION NUMBER: 1998:72697 USPATFULL

TITLE: Method of producing gaskets from polyurethane/urea compositions and gaskets produced therefrom

INVENTOR(S): Cageao, Ronald A., Beaver, PA, United States

Meltzer, A. Donald, Brecksville, OH, United States Suddaby, Brian R., Pittsburgh, PA, United States

PATENT ASSIGNEE(S): Bayer Corporation, Pittsburgh, PA, United States (U.S.

corporation)

APPLICATION INFO: US 1/06/74 19980623 APPLICATION INFO: US 1996-744037 19961105 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-484402, filed

on 7 Jun 1995, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted

PRIMARY EXAMINER: Sergent, Rabon

LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise

NUMBER OF CLAIMS: 15 EXEMPLARY CLAIM: 1

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 4 Drawing Page(s)

LINE COUNT: 1633

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to a method of forming a gasket around a substrate from a novel polyurethane/urea composition via the RIM process. Window gaskets may be produced by this method. These novel polyurethane/urea compositions comprise the reaction product of a (cyclo)aliphatic polyisocyanate having a viscosity of less than about 25,000 mPa.multidot.s at 25° C. and a NCO functionality of 2.0 to 4.0 with an isocyanate-reactive component comprising b1) a relatively high molecular weight organic compound containing hydroxyl groups, amine groups, or mixtures thereof; and b2) a low molecular weight chain extender selected from the group consisting of diols, primary amines, secondary amines, aminoalcohols, and mixtures thereof; in the presence of a catalyst. The isocyanate and isocyanate-reactive components are selected such that the crosslinking density of the resultant polyurethane/urea composition is at least 0.3 moles/kg. It is also possible that the isocvanate-reactive component comprises b3) a low molecular weight chain terminator, and/or b4) a low molecular weight crosslinking agent. When either or both of these components are included in the isocyanate-reactive component, A, b1), b2), and/or b3) and/or b4) must be selected such that the crosslinking density of the resultant polyurethane/urea composition is at least 0.3 moles/kg.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 14 OF 49 USPATFULL on STN

ACCESSION NUMBER: 1998:7110 USPATFULL

TITLE: Polydiene diols in resilient polyurethane foams
INVENTOR(S): Hernandez, Hector, Houston, TX, United States
PATENT ASSIGNEE(S): Shell Oil Company, Houston, TX, United States (U.S.

#### corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5710192 US 1996-724940 19980120 APPLICATION INFO.: 19961002 (8) DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Cooney, Jr., John M. LEGAL REPRESENTATIVE: Steinberg, Beverlee G. NUMBER OF CLAIMS: 20 EXEMPLARY CLAIM: LINE COUNT: 477

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Polyurethane foams having high resilience, significantly improved humid aging, excellent tear strength, and light color are formed from a polydiene diol, preferably a hydrogenated polybutadiene diol, having a hydroxyl functionality from 1.6 to 2.0 and from an aromatic polyisocyanate having an isocyanate functionality of from 1.8 to 2.5. The polydiene diol is preferably blended with foaming agents prior to addition of the highly reactive polvisocvanate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 15 OF 49 USPATFULL on STN

ACCESSION NUMBER: 96:116459 USPATFULL

TITLE: Polvisocvanate based upon 4,4'-and 2,4'-diphenvlmethane dllsocyanates and use thereof in a rim process

INVENTOR(S): Hurley, Michael F., Oakdale, PA, United States Eiben, Robert G., Bridgeville, PA, United States

PATENT ASSIGNEE(S): Bayer Corporation, Pittsburgh, PA, United States (U.S.

corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5585452 19961217 APPLICATION INFO:: US 1995-469963 19950606 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-144458, filed on 28

Oct 1993, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

FILE SEGMENT: Granted
PRIMARY EXAMINER: Seidleck, James J.
ASSISTANT EXAMINER: Truong, Duc

LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise NUMBER OF CLAIMS: 10

EXEMPLARY CLAIM: 1 LINE COUNT: 949

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A novel polyisocyanate which is liquid and room temperature stable and has an isocyanate group content of from 10 to 30% by weight is prepared by reacting:

a) an isocvanate mixture of 4.4'-diphenylmethane diisocvanate, 2,4'-diphenylmethane diisocyanate, and an amount of an isocyanate based upon diphenylmethane diisocyanate having an isocyanate functionality of more than 2, such that the total isocyanate mixture a) has an average isocyanate functionality of from 2.02 to 2.50, and

- b) one or more polvols selected from the group consisting of
- 1) diols having molecular weights of from 1000 to 5000,
- 2) triols having molecular weights of from 1000 to 6000, and
- 3) mixtures thereof.

When used in a RIM process, parts are produced which have excellent low temperature impact properties.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 16 OF 49 USPATFULL on STN

96:92149 USPATFULL ACCESSION NUMBER:

TITLE: Rim process utilizing isocyanates based upon 2,4'- and

4,4'-diphenylmethane diisocyanate INVENTOR(S):

Hurley, Michael F., Oakdale, PA, United States Eiben, Robert G., Bridgeville, PA, United States

Bayer Corporation, Pittsburgh, PA, United States (U.S. PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5563232 19961008

APPLICATION INFO.: US 1995-385017 19950207 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-144916, filed on 28

Oct 1993, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Seidleck, James J. ASSISTANT EXAMINER: Sergent, Rabon

LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

LINE COUNT: 725

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A RIM process utilizing a reaction product of an MDI containing from 6 to 50% by weight of the 2,4'-isomer and a polypropylene glycol as the isocvanate reactant results in a molded product having excellent low temperature impact properties.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 17 OF 49 USPATFULL on STN

ACCESSION NUMBER: 96:36599 USPATFULL

TITLE: Hydroxy and amino functional pyrrolizidine catalyst compositions for the production of polyurethanes

Carr, Richard V. C., Allentown, PA, United States INVENTOR(S): Lassila, Kevin R., Allentown, PA, United States Listemann, Mark L., Whitehall, PA, United States Mercando, Lisa A., Pennsburg, PA, United States

Minnich, Kristen E., Allentown, PA, United States Savoca, Ann C. L., Bernville, PA, United States Wressell, Amy L., Allentown, PA, United States

PATENT ASSIGNEE(S): Air Products and Chemicals, Inc., Allentown, PA, United

## States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION: APPLICATION INFO.:	US 5512603 US 1994-199396		19960430 19940222	(8)
DOCUMENT TYPE: FILE SEGMENT: PRIMARY EXAMINER:	Utility Granted Seidleck, James	т		
ASSISTANT EXAMINER:	Sergent, Rabon		W/11/ B	
LEGAL REPRESENTATIVE: NUMBER OF CLAIMS:	Leach, Michael, 20	marsn,	William F.	
EXEMPLARY CLAIM: LINE COUNT:	1 500			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A method for preparing a polyurethane foam which comprises reacting an organic polyisocyanate and a polyol in the presence of a blowing agent, cell stabilizer and a catalyst composition consisting essentially of a pyrrolizidine of the formula: ##STR1## where R.sub.1 and R.sub.2 independently are --H, --OH, ##STR2## or --NR.sub.4 R.sub.5, R.sub.3 is hydrogen, a C.sub.1 -C.sub.12 alkyl, C.sub.5 -C.sub.6 cycloalkyl, C.sub.6 -C.sub.10 aryl, or C.sub.7 -C.sub.11 arylalkyl group, and

R.sub.4 and R.sub.5 independently represent H, a C.sub.1 -C.sub.12 alkyl group, C.sub.5 -C.sub.10 cycloalkyl, C.sub.6 -C.sub.10 aryl, or C.sub.7 -C.sub.11 arvlalkyl group, provided that at least R.sub.1 or R.sub.2 is not hydrogen.

# CAS INDEXING IS AVAILABLE FOR THIS PATENT. L15 ANSWER 18 OF 49 USPATFULL on STN

ACCESSION NUMBER:	94:99905 USPATFULL
TITLE:	Preparation of compact or cellular elastomers
	containing urethane and urea groups, and moldings
	produced therefrom
INVENTOR(S):	Hinz, Werner, Frankenthal, Germany, Federal Republ

ederal Republic of Maletzko, Christian, Mannheim, Germany, Federal

Dame

Republic of

Becker, Johannes, Ludwigshafen, Germany, Federal Republic of

Matzke, Guenter, Ketsch, Germany, Federal Republic of PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Ludwigshafen, Germany, Federal Republic of (non-U.S. corporation)

MIMPED KIND

	NOPIDER	KIND	DAIL	
PATENT INFORMATION:	US 5364852		19941115	
APPLICATION INFO.:	US 1993-53759		19930429	(8)

NUMBER DATE PRIORITY INFORMATION: DE 1992-4218791 19920606 DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Seidleck, James J. ASSISTANT EXAMINER: Critharis, Mary LEGAL REPRESENTATIVE: Golota, Mary E.

NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 1043

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

- AB Compact or cellular elastomers containing urethane and urea groups are prepared by reacting
  - a) at least one organic and/or modified organic polvisocvanate
  - b) at least one N-propoxylated polyoxyalkylene-polyamine containing at least 50% of secondary amino groups or a mixture of said N-propoxylated polyoxyalkylene-polyamines and polyoxyalkylene-polyamines containing 2 to 4 primary amino groups and having a molecular weight of from 1000 to 8000,
  - c) at least one alkyl-substituted aromatic polyamine having a molecular weight up to 500, in the presence or absence of
  - d) catalysts and, if desired,
  - e) blowing agents,
  - f) auxiliaries and/or
  - g) additives.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 19 OF 49 USPATFULL on STN

ACCESSION NUMBER: 94:84285 USPATFULL

TITLE: Polyisocyanate based upon 4,4'- and

2,4'-diphenylmethane diisocyanates and use thereof in a

rim process

INVENTOR(S): Steppan, David D., Gibsonia, PA, United States

Slack, William E., Moundsville, WV, United States Beckley, Charles G., Moundsville, WV, United States

PATENT ASSIGNEE(S): Miles Inc., Pittsburgh, PA, United States (U.S.

corporation)

PRIMARY EXAMINER: Welsh, Maurice J.

LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise

NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
LINE COUNT: 954

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel liquid, room temperature polyisocyanate having isocyanate group contents of from 6 to 31% by weight, are prepared by reacting:

- a) a methylene-bis(phenyl isocyanate) containing
- 1) from 65 to 90% by weight of the 4,4'-isomer,

- 2) from 10 to 35% by weigh of the 2,4'-isomer, and
- 3) no more than 2% by weight of the 2,2'-isomer, with the percents of components a)1), a)2), and a)3) totalling 100%, and
- b) a mixture of:
- 1) one or more organic compounds having molecular weights of from 400 to 6000 and containing from 2 to 8 isocyanate reactive groups, and
- 2) one or more organic diols having molecular weights of from 60 to 200, excluding tripropylene glycol, the weight ratio of component b)1) to b)2) being from 150:1 to 5:1.

When used in a RIM process, molded products are obtained which have improved tear strength, improved flexural modulus, improved impact resistance, and improved tensile strength.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 20 OF 49 USPATFULL on STN

ACCESSION NUMBER: 93:69964 USPATFULL

TITLE: Cyclohexanedimethanoladipate based prepolymers and reaction injection molded products made therefrom

INVENTOR(S): Mafoti, Robson, Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Miles Inc., Pittsburgh, PA, United States (U.S.

corporation)

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

600

LINE COUNT:

AB

The present invention is directed to a polyisocyanate prepolymer prepared by reacting an isocyanate based on 4,4-methylenebis(phenyl isocyanate) and a polyester polyol by reacting 1,4-cyclohexanedimethanol and adipic acid. The invention is also directed to a RIM process using such prepolymers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 21 OF 49 USPATFULL on STN
ACCESSION NUMBER: 93:48632 USPATFULL
TITLE: Polyurea rim systems

INVENTOR(S): Slack, William E., Moundsville, WV, United States

Kratz, Mark R., Hannibal, OH, United States
PATENT ASSIGNEE(S): Miles Inc., Pittsburgh, PA, United States (U.S.

corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION: APPLICATION INFO.:	US 5219973 US 1990-623469		19930615 19901207	(7)
DOCUMENT TYPE:	Utility			
FILE SEGMENT: PRIMARY EXAMINER:	Granted Kight, III, John			
ASSISTANT EXAMINER:	Truong, Duc			
LEGAL REPRESENTATIVE: NUMBER OF CLAIMS:	Gil, Joseph C., E	Brown,	N. Denise	
EXEMPLARY CLAIM:	14			
LINE COUNT:	741			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to a RIM process and an isocyanate reactive composition for use therein. The isocyanate composition includes an amine terminated chain extender and an aromatic amine terminated polyether of the formula: ##STR1## wherein R is an n-valent group obtained by the removal of hydroxyl groups from an n-hydroxy group containing polyhydroxyl compound having a molecular weight of from about 300 to about 12,000,

R.sub.1 represents hydrogen or an inert substituent,

R.sub.2 represents hydrogen, an amine group, or an inert substituent, and

n represents an integer from 2 to 4.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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L15 ANSWER 22 OF 49 USPATFULL on STN

ACCESSION NUMBER: 92:78648 USPATFULL

TITLE: Polyurea rim systems having improved flow properties

and containing an organic cyclic carbonate

INVENTOR(S): Nodelman, Neil H., Pittsburgh, PA, United States

PATENT ASSIGNEE(S): Miles Inc., Pittsburgh, PA, United States (U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: IIS 5149458 19920922 APPLICATION INFO.: US 1991-686555 19910417 (7) RELATED APPLN. INFO.: Division of Ser. No. US 1990-546078, filed on 29 Jun 1990, now patented, Pat. No. US 5028635 which is a continuation-in-part of Ser. No. US 1990-463762, filed on 12 Jan 1990, now abandoned which is a continuation of Ser. No. US 1989-346186, filed on 4 May 1989, now abandoned which is a continuation-in-part of Ser. No. US 1988-212751, filed on 28 Jun 1988, now abandoned DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: Bleutge, John C. ASSISTANT EXAMINER: Krass, Frederick

LEGAL REPRESENTATIVE: Gil, Joseph C.

NUMBER OF CLAIMS: 3 EXEMPLARY CLAIM:

LINE COUNT: 623

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to a RIM process and an isocvanate-reactive mixture useful therein. The mixture comprises

i) a polyether having at least two isocyanate-reactive groups and a molecular weight of from 1800 to 12,000 in which at least 50% of the isocyanate-reactive groups are primary and/or secondary amine groups,

ii) an amine-terminated chain extender, and

iii) from 2 to 20 parts by weight per 100 parts by weight of components b) and c) of propylene carbonate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 23 OF 49 USPATFULL on STN

ACCESSION NUMBER: 92:29727 USPATFULL

TITLE: Combustion-modified polyurethane foam

INVENTOR(S): Turner, Robert B., Lake Jackson, TX, United States

Priester, Jr., Ralph D., Lake Jackson, TX, United

Burkes, Stephen R., Lake Jackson, TX, United States PATENT ASSIGNEE(S): The Dow Chemical Company, Midland, MI, United States

(U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5104910 APPLICATION INFO:: US 1991-637105 19920414 APPLICATION INFO.: 19910103 (7)

DOCUMENT TYPE: Utility FILE SEGMENT: Grant.ed PRIMARY EXAMINER: Welsh, Maurice J.

LEGAL REPRESENTATIVE: Galbraith, Ann K.

NUMBER OF CLAIMS: 18 EXEMPLARY CLAIM: LINE COUNT: 655

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Described herein is an isocyanate-reactive compound containing at least one linkage of the formula:

--X--X--

wherein X is independently in each occurrence --NR--, --S--, or --O--; R is independently in each occurrence hydrogen, C.sub.1-10 alkyl, aryl, or arylene; and at least one N, S, or O atom of the above formula is bonded to an aryl or arylene group. Also disclosed are isocyanate-reactive compositions containing the above compound and flexible polyurethane foams prepared therefrom.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 24 OF 49 USPATFULL on STN

ACCESSION NUMBER: 92:23268 USPATFULL

TITLE: Isocyanate terminated prepolymers and the use thereof

in a rim process

INVENTOR(S): Mafoti, Robson, Pittsburgh, PA, United States

PATENT ASSIGNEE(S): Mobay Corporation, Pittsburgh, PA, United States (U.S.

corporation)

LEGAL REPRESENTATIVE: Gil, Joseph C., Akorli, Godfried R. NUMBER OF CLAIMS: 5

EXEMPLARY CLAIM: 1 LINE COUNT: 756

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to a novel prepolymer and the use thereof in a RIM process. The prepolymer is an isocyanate terminated prepolymer having an isocyanate group content of from about 10 to about 26% by weight, and being prepared by a process comprising.

- (a) reacting a C.sub.1 to C.sub.5 alkyl acetoacetate, with a polyol having a molecular weight of from about 500 to about 6000, and a hydroxyl functionality of from 2 to 4, and
- (b) reacting the resultant product with an organic di- and/or polyisocyanate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 25 OF 49 USPATFULL on STN ACCESSION NUMBER: 91:52574 USPATFULL

TITLE: Polyurea-cyclic carbonate RIM systems having improved

flow properties

INVENTOR(S): Nodelman, Neil H., Pittsburgh, PA, United States
PATENT ASSIGNEE(S): Mobay Corporation, Pittsburgh, PA, United States (U.S.

corporation)

. INFO.: Continuation-in-part of Ser. No. US 1990-463762, filed on 12 Jan 1990, now abandoned which is a continuation of Ser. No. US 1989-346186, filed on 4 May 1989, now abandoned which is a continuation-in-part of Ser. No.

US 1988-212751, filed on 28 Jun 1988, now abandoned DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Kight, III, John ASSISTANT EXAMINER: Krass, Frederick LEGAL REPRESENTATIVE: Gil, Joseph C.

NUMBER OF CLAIMS: 3 EXEMPLARY CLAIM: 1 LINE COUNT: 633

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to a RIM process and an

isocyanate-reactive mixture useful therein. The mixture comprises

i) a polyether having at least two isocyanate-reactive groups and a molecular weight of from 1800 to 12,000 in which at least 50% of the isocvanate-reactive groups are primary and/or secondary amine groups,

ii) an amine-terminated chain extender, and

iii) from 2 to 20 parts by weight per 100 parts by weight of components b) and c) of propylene carbonate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT

L15 ANSWER 26 OF 49 USPATFULL on STN

ACCESSION NUMBER: 89:87579 USPATFULL

TITLE: Isocyanate reactive mixture and the use thereof in the manufacture of flexible polyurethane foams

Milliren, Charles M., Coraopolis, PA, United States INVENTOR(S):

Mobay Corporation, Pittsburgh, PA, United States (U.S. PATENT ASSIGNEE(S):

corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION: APPLICATION INFO.:	US 4876292 US 1988-254326		19891024 19881006	(7)
DOCUMENT TYPE: FILE SEGMENT: PRIMARY EXAMINER:	Utility Granted Welsh, Maurice J.			
ASSISTANT EXAMINER: LEGAL REPRESENTATIVE:	Henderson, L. Harsh, Gene, Gil,		n C.	
NUMBER OF CLAIMS: EXEMPLARY CLAIM:	8			
LINE COUNT:	523			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to a reactive mixture for use in preparing a flexible polyurethane foam and to the foams produced therefrom. The reactive mixture broadly comprises

(A) from more than 0 up to 3 parts by weight per 100 parts by weight of components (B) and (C) of an amine of the formula:

H. sub. 2 N--R--NH. sub. 2

AB

where R is a C.sub.4 to C.sub.10 straight or branched alkylene group, or a C.sub.4 to C.sub.15 alicyclic group,

- (B) from 0 to 30% by weight of a polyoxyalkylene polyamine having a molecular weight of from about 400 to about 5000 and containing from 2 to 3 primary amino groups, and
- (C) from 700 to 100% by weight of one or more polyether polyhydroxyl compounds having hydroxyl functionalities from about 2 to 3 and molecular weights of from about 1000 to about 10,000, the percents of components (B) and (C) totalling 100%.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 27 OF 49 USPATFULL on STN

ACCESSION NUMBER: 89:67507 USPATFULL

TITLE: Novel neopentyladipate based prepolymers and reaction

injection molded products made therefrom

INVENTOR(S): Mafoti, Robson, Pittsburgh, PA, United States Nodelman, Neil H., Pittsburgh, PA, United States

PATENT ASSIGNEE(S): Mobay Corporation, Pittsburgh, PA, United States (U.S.

corporation)

 NUMBER
 KIND
 DATE

 PATENT INFORMATION:
 US 4857561
 19890815

 APPLICATION INFO:
 US 1988-238436
 19880830
 (7)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Welsh, Maurice J.

LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C.

NUMBER OF CLAIMS: 7 EXEMPLARY CLAIM: 1

LINE COUNT: 666

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to a polyisocyanate comprising the reaction product of

(a) an isocyanate selected from the group consisting of methylenebis(phenylisocyanate), polymethylenepoly(phenylisocyanate), and mixtures thereof, and

(b) a polyester polyol having a hydroxyl functionality of from 2 to 3 and a molecular weight of from about 750 to about 3500, said polyester polyol prepared by reacting neopentyl glycol and adipic acid,

the isocyanate group content of said reaction product from about 14\$ to about 28\$ by weight. The invention is also directed to a RIM process using such prepolymers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 28 OF 49 USPATFULL on STN

INVENTOR(S):

ACCESSION NUMBER: 88:65673 USPATFULL

TITLE: Process for the production of molded articles, mixtures of isocvanate reactive compounds suitable therefor and

the molded articles obtained by the process

Weber, Christian, Leverkusen, Germany, Federal Republic

of

Schafer, Hermann, Leverkusen, Germany, Federal Republic

PATENT ASSIGNEE(S): Baver Aktiengesellshaft, Leverkusen, Germanv, Federal

Republic of (non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 4777187 19881011
APPLICATION INFO.: US 1988-149771 19880129 (7)

NUMBER DATE

		TIOT IDEA.	DITTE
PRIORITY	INFORMATION:	DE 1987-3703739	19870207
DOCUMENT	TYPE:	Utility	

FILE SEGMENT: Granted
PRIMARY EXAMINER: Welsh, Maurice J.

LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C., Rov, Thomas W.

NUMBER OF CLAIMS: 21 EXEMPLARY CLAIM: LINE COUNT: 914

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to a process for the production of polyurethane or polyurea elastomeric molded articles according to the reaction injection molding process by reacting a polyisocyanate, a high molecular weight isocyanate reactive component and optionally a diamine chain extender, wherein the improvement is based on the use of the reaction product of a polyepoxide containing at least two epoxide groups with at least one mol of an aromatic diamine per epoxide group wherein the polyepoxide is present in an amount sufficient to provide about 0.5 to 25% by weight of the polyepoxide based on the weight of all the isocyanate reactive components. The present invention is also directed to the isocyanate reactive components for use in this process and to the molded articles produced in accordance with this process.

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 29 OF 49 USPATFULL on STN

ACCESSION NUMBER: 88:62518 USPATFULL

TITLE: Process for the production of elastic molded articles INVENTOR(S): Weber, Christian, Leverkusen, Germany, Federal Republic

Wirtz, Hans, Leverkusen, Germany, Federal Republic of

Seel, Klaus, Cologne, Germany, Federal Republic of PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal

Republic of (non-U.S. corporation)

NUMBER KIND DATE US 4774264 19880927

PATENT INFORMATION: US 1986-853520 19860418 (6) APPLICATION INFO.:

RELATED APPLN. INFO.: Division of Ser. No. US 1982-443414, filed on 22 Nov 1982

NUMBER DATE \_\_\_\_\_ PRIORITY INFORMATION: DE 1981-3147736 19811202

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Welsh, Maurice J.

LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C., Whalen, Lyndanne M.

NUMBER OF CLAIMS: 15 EXEMPLARY CLAIM: LINE COUNT: 703

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Elastic molded articles having a closed surface layer are made from polyurea elastomers by the reaction injection molding technique. These

polyurea elastomers are prepared from a polyisocyanate in which all of the isocyanate groups are aromatically bound, a polyether and a diamine. The polyether has at least two isocyanate-reactive groups and a molecular weight from 1800 to 12,000. At least 50% of the isocyanate-reactive groups in the polyether are primary and/or secondary amino groups. The diamine has a molecular weight from 108 to 400 and primary and/or secondary aromatically bound amino groups. Known auxiliary agents and additives may also be employed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 30 OF 49 USPATFULL on STN

ACCESSION NUMBER: 88:62517 USPATFULL

TITLE: Process for the production of elastic molded articles INVENTOR(S): Weber, Christian, Leverkusen, Germany, Federal Republic

Wirtz, Hans, Leverkusen, Germany, Federal Republic of Seel, Klaus, Cologne, Germany, Federal Republic of

Bayer Aktiengesellschaft, Leverkusen, Germany, Federal PATENT ASSIGNEE(S): Republic of (non-U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 4774263 19880927 US 4774263 US 1982-443414 19821122 (6)

APPLICATION INFO.:

INVENTOR(S):

NUMBER DATE 

PRIORITY INFORMATION: DE 1981-3147736 19811202 DOCUMENT TYPE: Utility

FILE SEGMENT: Granted
PRIMARY EXAMINER: Welsh, Maurice J.

LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C., Whalen, Lyndanne M.

NUMBER OF CLAIMS: 14 EXEMPLARY CLAIM: LINE COUNT: 719

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Elastic molded articles having a closed surface layer are made from polyurea elastomers by the reaction injection molding technique. These polyurea elastomers are prepared from a polyisocyanate in which all of the isocyanate groups are aromatically bound, a polyether and a diamine. The polyether has at least two isocyanate-reactive groups and a molecular weight from 1800 to 12,000. At least 50% of the isocyanate-reactive groups in the polyether are pirimary and/or secondary amino groups. The diamine has a molecular weight from 108 to 400 and primary and/or secondary aromatically bound amino groups. Known auxiliary agents and additives may also be employed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 31 OF 49 USPATFULL on STN

ACCESSION NUMBER: 87:13182 USPATFULL

TITLE: Process for the production of microcellular or foamed moldings and compounds containing isocyanate-reactive

groups suitable for carrying out this process Rasshofer, Werner, Cologne, Germany, Federal Republic

of

Meiners, Hans-Joachim, Leverkusen, Germany, Federal Republic of

Seel, Klaus, Cologne, Germany, Federal Republic of Wussow, Hans-Georg, Duesseldorf, Germany, Federal

Republic of

PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal

Republic of (non-U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 4645630 US 1984-645734 19870224 APPLICATION INFO.: 19840830 (6)

NUMBER DATE

PRIORITY INFORMATION: DE 1983-3333464 19830916 DOCUMENT TYPE: FILE SEGMENT: Granted
PRIMARY EXAMINER: Anderson, Philip

Utility

LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C., Roy, Thomas W.

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

LINE COUNT: 1141

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to a process for the production of polyurethane-urea or polyurea-based microcellular of foam moldings by reacting a polyisocyanate component containing aromatically bound isocyanate groups with an isocyanate-reactive component containing at least one compound which has at least three aliphatic ether groups and aliphatically bound isocyanate-reactive groups and wherein a portion of the aliphatically bound-reactive groups are amino groups which have been converted to ammonium carbamate, carbonate or bicarbonate groups.

The present invention also relates to the compounds containing aliphatic ether groups and ammonium carbamate, carbonate or bicarbonate groups, optionally in admixture with compounds containing unmodified amino groups or other known isocyanate-reactive compounds.

#### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 32 OF 49 USPATFULL on STN

ACCESSION NUMBER:

INVENTOR(S):

85:8920 USPATFULL

TITLE:

Process for the production of microcellular moldings from diisocvanate and compounds containing groups obtained by reacting amino groups with carbon dioxide Schafer, Walter, Cologne, Germany, Federal Republic of Meiners, Hans-Joachim, Leverkusen, Germany, Federal

Republic of Seel, Klaus, Cologne, Germany, Federal Republic of Reichmann, Wolfgang, Hilden, Germany, Federal Republic

Wagner, Kuno, Leverkusen, Germany, Federal Republic of Findeisen, Kurt, Odenthal, Germany, Federal Republic of PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 4499038 APPLICATION INFO.: US 1983-549040 19850212 19831107 (6)

NUMBER DATE

PRIORITY INFORMATION: DE 1982-3242925 19821120 DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Welsh, Maurice J.

LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C.

NUMBER OF CLAIMS: 9 EXEMPLARY CLAIM:

LINE COUNT: 990

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to a process for the production of polyurea-based microcellular moldings comprising reacting

- (a) at least one diisocyanate or polyisocyanate containing only aromatically bound isocvanate groups,
- (b) at least one compound containing at least two isocvanate-reactive groups, and
- (c) optionally the auxiliaries and additives known in polyurethane chemistry, in closed molds, components (a)-(c) being processed as a one-shot system by reaction injection molding, characterized in that component (b) comprises at least one polyether compound (b1) optionally in admixture with other isocyanate-reactive compounds and containing at least 3 aliphatically bonded ether groups and n-aliphatically bonded isocyanate-reactive groups, n standing for an integer or, statistically a fraction of from 2-4
- (i) at least (100:n) % of the isocyanate-reactive groups present in component (b1) being aliphatically bonded primary and/or secondary amino groups,
- (ii) at least 10 equivalent % of said amino groups being present in the form of ammonium carbamate groups having a functionality of two in the isocvanate addition reaction, of the type obtained by reacting aliphatically bonded, primary or secondary amino groups with carbon dioxide.
- (iii) the unmodified compounds containing at least 3 ether groups having a molecular weight of from 200 to 10,000 and
- (iv) at least 0.2 equivalent % of all isocvanate-reactive groups of the total component (b) being ammonium carbamate groups.

The present invention also relates to said compounds (b) optionally in admixture with the auxiliaries and additives known in polyurethane chemistry.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 115 33-49 ibib abs

L15 ANSWER 33 OF 49 USPATFULL on STN ACCESSION NUMBER: 84:20236 USPATFULL

TITLE: Process for the production of molded articles

INVENTOR(S): Rasshofer, Werner, Cologne, Germany, Federal Republic

Schafer, Hermann, Leverkusen, Germanv, Federal Republic

Paul, Reiner, Muelheim-Ruhr, Germany, Federal Republic

Beuth, Josef, Frechen, Germany, Federal Republic of PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal

Republic of (non-U.S. corporation)

NUMBER KIND DATE ----- ----PATENT INFORMATION: US 4442236 APPLICATION INFO.: US 1983-522276 19840410 19830811 (6)

NUMBER DATE

PRIORITY INFORMATION: DE 1982-3231399 19820824

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Cockeram, H. S.

LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C.

NUMBER OF CLAIMS: 13

EXEMPLARY CLAIM: LINE COUNT: 607

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A process for the production of optionally cellular molded articles with a smooth outer skin and improved surface characteristics by the reaction, inside a closed mold, of a mixture of one or more organic polyisocyanates, one or more compounds having molecular weights of from 400 to 12,000, which contain at least two isocyanate-reactive groups, chain-linking and/or chain-extending agents, and optionally, known auxiliary agents and additives used in polyurethane chemistry, characterized in that before the reaction, surface-improving additives comprising one or more polymers or copolymers of one or more olefinically-unsaturated monomers, which polymers or copolymers have molecular weights of from 200 to 50,000, are liquid at room temperature, soluble in the reaction mixture, and inert toward isocyanate groups and at least one metal salt of a monocarboxylic acid having at least 8

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 34 OF 49 USPATFULL on STN ACCESSION NUMBER: 81:5293 USPATFULL

TITLE: Alkoxylated formose polyols and their use in

carbon atoms, are incorporated into the reaction mixture.

polyurethane plastics Wagner, Kuno, Leverkusen, Germany, Federal Republic of INVENTOR(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal PATENT ASSIGNEE(S):

Republic of (non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 4247654 APPLICATION INFO.: US 1979-15082 19810127

19790226 (6)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1977-829170, filed on 30 Aug 1977, now abandoned

NUMBER DATE

PRIORITY INFORMATION: DE 1976-2639083 19760831

DOCUMENT TYPE: Utility FILE SEGMENT: Granted
PRIMARY EXAMINER: Cockeram, H. S.

LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C.

NUMBER OF CLAIMS: 1.0

EXEMPLARY CLAIM: NUMBER OF DRAWINGS: 2 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT: 2116

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention is directed to a process for the production of polyether polyols having an average molecular weight of from 200 to 10,000 and an average hydroxyl functionality of from 2.0 to 7.0, comprising reacting one or more alkylene oxides, optionally successively, with a mixture of polyhydric alcohols which has been produced by reduction of the condensation products from the condensation of formaldehyde hydrate. The invention is also directed to the process for the production of polyether polyols characterized in that the mixture of polyhydric alcohols is mixed with dihydric and/or trihydric alcohols and/or monoamines or polyamines prior to alkoxylation. Finally, the invention is directed to the use of the alkoxylated mixtures as the isocyanate-reactive component in the production of optionally cellular polyurethane plastics.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 35 OF 49 USPATFULL on STN

ACCESSION NUMBER: 80:25784 USPATFULL

TITLE: Polyurethane foams and elastomers prepared from low

molecular weight polyhydroxyl compounds

INVENTOR(S): Muller, Hanns P., Leverkusen, Germany, Federal Republic

Wagner, Kuno, Leverkusen, Germany, Federal Republic of

PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal

Republic of (non-U.S. corporation)

NUMBER KIND DATE US 4205138 PATENT INFORMATION: 19800527 APPLICATION INFO.: US 1979-38033 19790510 (6)

RELATED APPLN. INFO.: Division of Ser. No. US 1978-934567, filed on 17 Aug

1978, now patented, Pat. No. US 4156636

NUMBER DATE

PRIORITY INFORMATION: DE 1977-2738512 19770826 DOCUMENT TYPE: Utility FILE SEGMENT: Granted
PRIMARY EXAMINER: Cockeram, H. S.
LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C. NUMBER OF CLAIMS: 1 EXEMPLARY CLAIM: LINE COUNT: 890

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention relates to an improved process for the production of a mixture of low molecular weight polyhydric alcohols, hydroxy aldehydes and hydroxy ketones by condensing formaldehyde hydrate in the presence of calcium hydroxide as catalyst and in the presence of compounds capable of enediol formation as co-catalyst. A formaldehyde-containing enediol formation as co-catalyst. A formaldehyde containing solution of the co-catalyst in water and, optionally, low molecular weight monohydric or polyhydric alcohols and/or relatively high molecular weight polyhydroxyl compounds is adjusted to a pH value of from 9 to 12, preferably from 9 to 10, by the addition of calcium hydroxide at a temperature of from 80° to 110° C., preferably from 90° to 105° C., so that condensation of the formaldehyde hydrate is initiated. An aqueous formalin solution and/or paraformaldehyde dispersion containing from 20 to 65%, by weight, of formaldehyde and calcium hydroxide are then introduced in such a quantity that the reaction mixture is maintained at a pH value of from 7.5 to 9.5, preferably from 8 to 9, at a temperature of from 80° to 110° C., preferably from 90° to 105° C. The concentration of formaldehyde is maintained at from 0.5 to 10%, by weight, preferably from 1.2 to 6%, by weight, based on the reaction mixture as a whole, throughout the condensation reaction. Finally, the residual quantity of formaldehyde, amounting to from 0.5 to 10%, by weight, is optionally removed by further condensation at pH values below 7 or by reaction with other compounds that are reactive with formaldehyde hydrate.

#### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 36 OF 49 USPATFULL on STN

ACCESSION NUMBER: 79:52259 USPATFULL

TITLE: Polyurethane chain-extenders

INVENTOR(S): Marquis, Edward T., Austin, TX, United States Yeakey, Ernest L., Austin, TX, United States

PATENT ASSIGNEE(S): Texaco Development Corp., White Plains, NY, United

States (U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 4180644 19791225 19780731 (5) US 1978-929756 APPLICATION INFO.: DOCUMENT TYPE: Utility

FILE SEGMENT: Granted PRIMARY EXAMINER: Welsh, Maurice J.

LEGAL REPRESENTATIVE: Ries, Carl G., Whaley, Thomas H., Bailey, James L. NUMBER OF CLAIMS:

EXEMPLARY CLAIM: LINE COUNT: 510

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Covers certain aromatic-amine amides which comprise the reaction product of an alkylene polyoxypropylene diamine, triamine, or tetramine and an isatoic anhydride of the formula: ##STR1## where R" is selected from the group consisting of hydrogen, alkyl, nitro, halo, hydroxy, amino, and cyano, and n is a number of 1-4. Also covers the use of said compounds

as chain-extenders in polyurethane compositions. Such chain-extenders provide for the production of polyurethane elastomers having improved tensile strength, tear strength and elongation properties.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 37 OF 49 USPATFULL on STN

ACCESSION NUMBER: 79:26205 USPATFULL

TITLE: Process for the production of low molecular weight

polyhydroxyl compounds

INVENTOR(S): Muller, Hanns P., Leverkusen, Germany, Federal Republic

of

Wagner, Kuno, Leverkusen, Germany, Federal Republic of PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal

Republic of (non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 4156636 19790529
APPLICATION INFO:: US 1978-934567 19780817 (5)

NUMBER DATE

PRIORITY INFORMATION: DE 1977-2738512 19770826 DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Evans, Joseph E.

LEGAL REPRESENTATIVE: Harsh, Gene, Gil, Joseph C.

NUMBER OF CLAIMS: 11

EXEMPLARY CLAIM: 1,11

LINE COUNT: 898

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Low molecular weight polyhydroxyl compounds are made from formaldehyde hydrate by an improved process comprising adjusting the pH of an aqueous solution of formaldehyde and co-catalyst to 9-12 with calcium hydroxide at 80°-110° C. to begin condensation and then adding to

this reaction mixture aqueous formalin and/or paraformaldehyde and calcium hydroxide to maintain a pH of 7.5-9.5 and temperature of

80°-110° C.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 38 OF 49 USPATFULL on STN ACCESSION NUMBER: 78:59947 USPATFULL

TITLE: Catalyst systems containing dimethylamino ether

mono-ols for polyurethane foam formation

INVENTOR(S): Sandner, Michael Ray, Chappaqua, NY, United States

Duffy, Robert Donovan, Summersville, WV, United States

PATENT ASSIGNEE(S): Union Carbide Corporation, New York, NY, United States

(U.S. corporation)

 NUMBER
 KIND
 DATE

 PATENT INFORMATION:
 US 4122038
 19781024

 APPLICATION INFO:
 US 1977-819331
 19790727
 (5)

RELATED APPLN. INFO.: Division of Ser. No. US 1975-581745, filed on 29 May

1975, now patented, Pat. No. US 4049931

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
FRIMARY EXAMINER: Garvin, Patrick
LEGAL REPRESENTATIVE: Klosty, Marylin
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
LINE COUNT: 2964

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Cellular urethane polymers are provided by effecting the reaction of an organic polyol reactant comprising a polyether polyol and an organic polyisocyanate reactant in the presence of a blowing agent and a catalyst system comprising a tertiary-dimethylamino ether mono-ol. In the dimethylamino ether mono-ols employed as catalysts in the practice of the invention, the tertiary-dimethylamino group and the hydroxyl group are positioned beta to a common acyclic ether oxygen atom or to different acyclic ether oxygen atoms which in turn are positioned beta to one another. The said dimethylamino ether mono-ols are versatile, low odor catalysts and are useful in forming cellular urethane polymers ranging from all water-blown flexible polyether foam to all fluorocarbon-blown rigid foam including semi-flexible and high-resilience foam products. Especially preferred for use in the practice of the invention are 2-(2-dimethylaminoethoxy)ethanol and 2-[2-(2-dimethylaminoethoxy)ethoxy]ethanol either as such or in combination with other catalysts including other tertiary-amine components and/or organic compounds of tin. Also provided are blended catalyst systems comprising said dimethylamino ether mono-ols.

### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSMER 39 OF 49 USPATFULL on STN
ACCESSION NUMBER: 77:51315 USPATFULL
TITLE: Catalyst systems containing dimethylamino ether mono-ols for polyurethane foam formation
Sandner, Michael Ray, Chappaqua, NY, United States
Duffy, Robert Donovan, Summersville, WV, United States
Union Carbide Corporation, New York, NY, United States

NUMBER KIND DATE PATENT INFORMATION: US 4049931 19770920 19750529 (5) APPLICATION INFO.: US 1975-581745 DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: Czaja, Donald E. ASSISTANT EXAMINER: Fletcher, H. H. LEGAL REPRESENTATIVE: Klosty, Marylin NUMBER OF CLAIMS: EXEMPLARY CLAIM: 3171 LINE COUNT:

(U.S. corporation)

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Cellular urethane polymers are provided by effecting the reaction of an organic polyol reactant comprising a polyether polyol and an organic polyisocyanate reactant in the presence of a blowing agent and a catalyst system comprising a tertiary-dimethylamino ether mono-ol. In the dimethylamino ether mono-ols employed as catalysts in the practice of the invention, the tertiary-dimethylamino group and the hydroxyl

group are positioned beta to a common acyclic ether oxygen atom or to different acyclic ether oxygen atoms which in turn are positioned beta to one another. The said dimethylamino ether mono-ols are versatile, low odor catalysts and are useful in forming cellular urethane polymers ranging from all water-blown flexible polyether foam to all fluorocarbon-blown rigid foam including semi-flexible and high-resilience foam products. Especially preferred for use in the practice of the invention are 2-(2-dimethylaminoethoxy)ethanol and 2-[2-(2-dimethylaminoethoxy) ethoxylethanol either as such or in combination with other catalysts including other tertlary-amine components and/or organic compounds of tin. Also provided are blended catalyst systems comprising said dimethylamino ether mono-ols.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 40 OF 49 USPATFULL on STN

ACCESSION NUMBER: 76:29069 USPATFULL

TITLE: Novel hydrophobic polyurethane foams

INVENTOR(S): Kehr, Clifton L., Silver Spring, MD, United States
Marans, Nelson S., Silver Spring, MD, United States

PATENT ASSIGNEE(S): W. R. Grace & Co., New York, NY, United States (U.S.

corporation)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1973-322666, filed on 11

Jan 1973, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: IVY, C. Warren
LEGAL REPRESENTATIVE: Bond, Eugene M.

NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
LINE COUNT: 790

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention disclosed is for new improved hydrophobic polyurethane foams prepared by reacting a hydrophobic polyisocyanate reactant with large amounts of an aqueous reactant in the presence of an emulsifying agent. The resultant foams may be characterized with a broad spectrum of improved properties including load-bearing characteristics, hydrophobic properties, textural characteristics and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 41 OF 49 USPATOLD on STN

ACCESSION NUMBER: 1974:65637 USPATOLD
TITLE: MONO AND TRIS(AMINO LOWERALKOXY) (ALKYL)

POLYOXYALKYLENE COMPOUNDS AND METHOD OF PREPARATION

INVENTOR(S): POPPELSDORF F

PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

 NUMBER
 KIND
 DATE

 PATENT INFORMATION:
 US 3799986
 A 19740326

 APPLICATION INFO.:
 US 1967-689004
 19671201

	NUMBER		DATE	
PRIORITY INFORMATION:  DOCUMENT TYPE:	US 1967-689004 US 1961-107060 US 1967-688971 US 1967-688976 Utility GRANTED HIGEL, FLOYD D		19671208 19610502 19671208 19671208	
FILE SEGMENT: PRIMARY EXAMINER: LINE COUNT:	HIGEL, FLOYD D 1376			
	SPATOLD ON STN 1972:61906 USPATOLD DIAGID BRIDGED RING COMPOUNDS LYNN JOHN W HENRY JOSEPH P TRECKER DAVID J UNION CARBIDE CORPORATION			
PATENT ASSIGNEE(S):				
	NUMBER		DATE	
PATENT INFORMATION: APPLICATION INFO.:	US 3646132 US 1969-846251	A	19720229 19690701	
	NUMBER		DATE	
PRIORITY INFORMATION:	US 1965-520298 US 1969-846251		19651209 19690730	
DOCUMENT TYPE: FILE SEGMENT: PRIMARY EXAMINER: ASSISTANT EXAMINER: LINE COUNT: CAS INDEXING IS AVAILAR CAS INDEXING IS AVAILAR	GRANTED WEINBERGER, LORR GLEIMAN, E J 1678 BLE FOR THIS PATEN	AINE A		
L15 ANSWER 43 OF 49 U ACCESSION NUMBER: TITLE: INVENTOR(S): PATENT ASSIGNEE(S):	1972 • 61815 HSPA	TOLD RIDYL)	CYCLOHEXANE	
	NUMBER			
PATENT INFORMATION: APPLICATION INFO.:	US 3646041 US 1970-7310		19720229 19700101	
	NUMBER		DATE	
PRIORITY INFORMATION: DOCUMENT TYPE: FILE SEGMENT: PRIMARY EXAMINER: ASSISTANT EXAMINER: LINE COUNT:			19700108	

CAS INDEXING IS AVAILABLE FOR THIS PATENT. CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 44 OF 49 USPATOLD on STN

ACCESSION NUMBER: 1971:56250 USPATOLD

TITLE: BETA CYANOALKYL ETHERS OF POLYOXYALKYLENE ADDUCTS OF

MODERATELY HIGH MOLECULAR WEIGHT INVENTOR(S):

POPPELSDORF FEDOR PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

NUMBER KIND DATE PATENT INFORMATION: US 3560549 A 19710202 APPLICATION INFO.: US 1967-688976 19671201

NUMBER DATE \_\_\_\_\_ 19610502 PRIORITY INFORMATION: US 1961-107060 US 1967-688971 US 1967-688976 US 1967-689004 19671208 19671208 19671208

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED PRIMARY EXAMINER: BRUST, JOSEPH P

LINE COUNT: 1584

L15 ANSWER 45 OF 49 USPATOLD on STN

ACCESSION NUMBER: 1970:41512 USPATOLD TITLE: METHOD FOR MAKING SYM TRIS (4 PYRIDYL) CYCLOHEXANES AND

ALKYL SUBSTITUTED SYM TRIS (4 PYRIDYL) CYCLOHEXANES

INVENTOR(S): UELZMANN HEINZ

PATENT ASSIGNEE(S): GENCORP INC.

NUMBER KIND DATE PATENT INFORMATION: US 3528988 A 19700915 APPLICATION INFO.: US 1967-674760 19671001

NUMBER DATE -----

PRIORITY INFORMATION: US 1967-674760

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: RANDOLPH, JOHN D
LINE COUNT: 768

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 46 OF 49 USPATOLD on STN ACCESSION NUMBER: 1970:4861 USPATOLD

NORBORNANE DIISOCYANATES TITLE: INVENTOR(S): LYNN JOHN W

HENRY JOSEPH P TRECKER DAVID J

PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION

NUMBER KIND DATE

PATENT INFORMATION: US 3492330 A 19700127 US 1966-520298 19660101 APPLICATION INFO.: NUMBER DATE PRIORITY INFORMATION: US 1965-520298 19651209 US 1969-846251 US 1969-846256 19690730 19690730 DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED PRIMARY EXAMINER: PARKER, CHARLES B LINE COUNT: 1827 CAS INDEXING IS AVAILABLE FOR THIS PATENT. CAS INDEXING IS AVAILABLE FOR THIS PATENT. L15 ANSWER 47 OF 49 USPATOLD on STN ACCESSION NUMBER: 1969:63192 USPATOLD TITLE: PHOTOSENSITIZED CYCLOADDING PROCESS INVENTOR(S): ARNOLD DONALD R STEHR CHARLES E TRECKER DAVID J PATENT ASSIGNEE(S): UNION CARBIDE CORPORATION NUMBER KIND DATE PATENT INFORMATION: US 3483102 A 19691209 US 1964-365527 19640501 APPLICATION INFO.: NUMBER PRIORITY INFORMATION: US 1964-365527 19640506 DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED PRIMARY EXAMINER: WILLIAMS, HOWARD S
LINE COUNT: 1476 CAS INDEXING IS AVAILABLE FOR THIS PATENT. CAS INDEXING IS AVAILABLE FOR THIS PATENT. L15 ANSWER 48 OF 49 USPATOLD on STN ACCESSION NUMBER: 1966:29480 USPATOLD TITLE: Preparation of cellular isocyanatepolyamino compound reaction products MAXEY EDWIN M INVENTOR(S): GMITTER GEORGE T NUMBER KIND DATE PATENT INFORMATION: US 3256213 A 19660614 DATE NUMBER PRIORITY INFORMATION: US 1962-198765 DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: BERCOVITZ, LEON L

710

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT. CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 49 OF 49 USPAT2 on STN

ACCESSION NUMBER: 2003:325213 USPAT2

TITLE: High performance RIM elastomers and a process for their

production

INVENTOR(S): Super, Michael S., Oakdale, PA, United States

> Steppan, David D., Gibsonia, PA, United States Slack, William E., Moundsville, WV, United States

Potts, Bruce H., Beaver, PA, United States Hurley, Michael F., Pittsburgh, PA, United States

PATENT ASSIGNEE(S): Bayer Corporation, Pittsburgh, PA, United States (U.S.

corporation)

KIND DATE NUMBER US 2002-165297 Utility PATENT INFORMATION: APPLICATION INFO.: 20020606 (10) DOCUMENT TYPE: FILE SEGMENT: GRANTED PRIMARY EXAMINER: Sergent, Rabon

LEGAL REPRESENTATIVE: Gil, Joseph C., Brown, N. Denise NUMBER OF CLAIMS: 26

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT: 1256

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention relates to high performance RIM (reaction injection molded) poly(urethane)urea elastomers, and to a process for their production. These elastomers comprise the reaction product of an allophanate-modified diphenylmethane diisocyanate prepolymer having an NCO group content of about 5 to about 30%, with an isocyanate-reactive component comprising a high molecular weight amine-terminated polyether polyol, an aromatic diamine chain extender, and, optionally, a chain extender or crosslinker selected from the group consisting of aliphatic amine terminated polyether polyols and aliphatic hydroxyl terminated polyether polyols, optionally, in the presence of an internal mold release agent, a surfactant and a filler.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 08:06:06 ON 17 JUL 2008)

FILE '1MOBILITY, 2MOBILITY, ALUMINIUM, ANTE, APOLLIT, BABS, CAPLUS, CBNB, CEABA-VTB, CERAB, CIN, CIVILENG, COMPENDEX, COPPERLIT, CORROSION, DKF, EMA, ENERGY, HEALSAFE, IFIPAT, INSPEC, INSPHYS, MATBUS, MDF, MECHENG, METADEX, MSDS-CCOHS, MSDS-OHS, PASCAL, ...' ENTERED AT 08:07:07 ON 17 JUL 2008

```
4054 $ FLEXIBLE (L) POLYURETHANE (L) DIOL (L) TRIOL
L1
L2
              0 S L1 (L) HYDRODROFORMYLATION (L) RANEY (2W) NICKEL
L.3
             8 S L1 (L) HYDROFORMYLATION (L) (RANEY (2W) NICKEL)
1.4
             57 S L1 (L) (RANEY (2W) NICKEL)
1.5
            49 S L4 NOT L3
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L6	45	.5 AND RATIO	
L7	33	6 AND (ETHANOL OR METHANOL OR PROPANOL)	
L8	2442	1 AND FOAM	
L9	54	.8 AND (RANEY (2W) NICKEL) AND RATIO	
L10	42	9 AND (METHANOL OR ETHANOL OR PROPANOL)	
L11	36	.10 NOT L3	
L12	2320	FLEXIBLE (L) POLYURETHANE (L) FOAM (L) DIOL (L) TRIOL (L)	MIX
L13	43	12 AND (METHANOL OR ETHANOL OR PROPANOL) AND (RANEY (2W)	NI
L14	56	.12 AND (RANEY (2W) NICKEL)	
L15	49	.14 AND HYDROGENATION	

=> log off ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF LOGOFF? (Y)/N/HOLD:y

STN INTERNATIONAL LOGOFF AT 08:51:12 ON 17 JUL 2008